

OPERATORS AND PARTS MANUAL NO. 03-6-TSS-F&R
FOR
3200 & 4200 SERIES

MEYER
TSS VARIABLE SPEED MODEL
Front & Rear Unload Forage Boxes
with Independent Outfeed Clutch



3200 SERIES:

Model 3216

Model 3218

Model 3220

DO NOT OPERATE EQUIPMENT UNTIL THIS MANUAL HAS BEEN READ AND UNDERSTOOD.

4200 SERIES:

Model 4216

Model 4218

Model 4220

Model 4222



MEMBER



Over
60 years
of service
to our customers

Manufactured by
Meyer Mfg. Corp.

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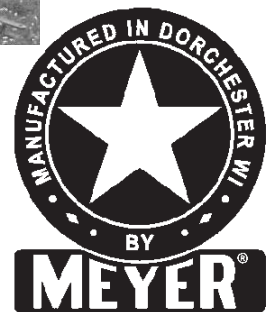


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NEW MEYER (FRONT & REAR UNLOAD) FORAGE BOX MANUFACTURER'S WARRANTY

Jan. 1, 1995

- I. The "Product Registration & Inspection Certificate" along with the original billing invoice "Owner's Registration Form" must be completed in full and promptly returned to Meyer Mfg. Corp. for this warranty to become both valid and effective. All warranties on New Meyer Forage Boxes shall apply only to the original retail customer from an authorized Meyer Mfg. Corp. dealership.
- II. This warranty shall not apply to any Meyer Forage Box which has been subjected to misuse, negligence, alteration, accident, incorrect operating procedures, or which shall have been repaired with parts other than those obtained through Meyer Mfg. Corp.
- III. Meyer Mfg. Corp. warrants New Meyer Forage Boxes to be free from defects in material and workmanship under recommended use and maintenance service, as stated in the Operator's and Parts Manual," as follows:
 - A. Meyer Mfg. Corp. will repair or replace F.O.B. Dorchester, WI, as Meyer Mfg. Corp. elects, any part of a new Meyer Forage Box which is defective in material or workmanship:
 1. Without charge for either parts or labor during the first (1) year from purchase date to the original retail customer.
 2. Without charge for parts only during the second (2) year from purchase date to the original retail customer.
 - B. In addition to the above basic warranty, Meyer Mfg. Corp. will repair or replace F.O. B. Dorchester, WI as Meyer Mfg. Corp. elects:
 1. Any part of the following which is defective in material or workmanship (not neglect to recommended use and service) without charge for parts only (not labor) during the stated time periods from date of purchase to the original retail customer:

Two (2) Years:

 - a. The 3200 and 4200 Series enclosed main apron drive Superior gearbox assembly, Meyer #19-0024 and #19-0025.
 - b. The D667H and D667X pintle main apron chain assembly.
 2. Any part of the following which is defective in material or workmanship (not neglect to recommended use and service) with a "pro-rated" charge for parts only (not labor) during the stated time period from date of purchase to the original retail customer:

Ten (10) Years:

 - a. The all bolted or all welded steel frame box structure.
 - b. The aluminized steel or galvaneal steel painted panels which comprise the sides and rear of the box portion (not front unit) of the forage box, upon evidence satisfactory to Meyer Mfg. Corp., that any such panel either rusted or corroded through or cracked or split.
- IV. COMMERCIAL USE: Coverage as in paragraph III A1 ONLY, except warranty coverage is for (90) days for parts and labor to the original commercial retail customer.
- V. Repairs eligible for labor warranty must be made by Meyer Mfg. Corp. or an authorized Meyer dealership. The original retail customer is responsible for the transportation of the forage box to the dealership for warranty service or for any service call expenses.
- VI. Except as stated above, Meyer Mfg. Corp. shall not be liable for injuries or damages of any kind or nature, direct, consequential, or contingent, to persons or property. This warranty does not extend to loss of crop or for any other reasons.
- VII. No person is authorized to give any other warranties or to assume any other obligation on Meyer Mfg. Corp.'s. behalf unless made or assumed in writing by Meyer Mfg. Corp. This warranty is the sole and exclusive warranty which is applicable in connection with the manufacture and sale of this product and Meyer Mfg. Corp.'s responsibility is limited accordingly.
- VIII. This warranty is effective on all sales of Meyer Forage Boxes made after serial #95T2201.

Optional Equipment-Tarp, scales etc. warranty-See original equipment warranty.

INTRODUCTION

Congratulations on your purchase of a new Meyer farm equipment product. Undoubtedly you have given much consideration to your purchase and we're proud that you have selected Meyer. Pride in craftsmanship, engineering and customer service have made Meyer products the finest in the farm equipment industry today.

There is no substitute for quality. That is why thousands of people like you have purchased Meyer farm equipment. They felt it was the best equipment to serve their farming needs, now and in years to come. We ask that you follow our policy of "safety first," and we strongly suggest that you read through the owner's manual before operating your Meyer farm equipment.

Meyer Manufacturing Corporation wants to thank you for not compromising quality. We are determined to offer excellence in customer service as well as provide you with the very best value for your dollar.

REMEMBER:

**FARM EQUIPMENT BUYERS
TRUST THE NAME MEYER!**

Sincerely,

All Employees of
MEYER MANUFACTURING CORPORATION

Meyer Mfg. Corp. reserves the right to make improvements in design, or changes in specifications at any time, without incurring any obligation to owners of units previously sold.

This supersedes all previous published instructions.

IMPORTANT:

At the front of this manual is a Product Registration and Inspection Certificate. Be sure your dealer has completed this certificate and promptly forwarded a copy to Meyer Manufacturing to validate the manufacturer's warranty. The product model and serial number are recorded on this certificate and below for proper identification of your Meyer Forage Box by your dealer and the manufacturer when ordering repair parts. The serial number plate is found near the control levers on your forage box and stamped in the front corner of the left hand end frame.

Model No. _____

Serial No. _____

Date of Purchase _____

At the back of this manual is the repair parts section. All replacement parts are to be obtained from or ordered through your Meyer dealership. When ordering repair parts, refer to the parts section and give complete information including quantity, correct part number, detailed description and even Model No. and Serial No. of the forage box which needs repair parts.

NOTE: All references to right hand (RH), left hand (LH), front and rear apply to the product as viewed from the rear of the box.

IMPORTANT: The standard forage box header unit discharges to the LH side and the parts illustrations depict these units. If you have an optional RH unit, always specify the part number shown in this book followed by -RH. Nearly all header parts appear similar to the standard unit but are really mirror images. Box parts are all identical. If you specify -RH and there is no difference in the item you wish to order, this will be properly interpreted at the factory and will not cause any problem.

SAFETY PRECAUTIONS



This symbol is used to call attention to instructions concerning personal safety. Be sure to observe and follow these instructions. Take time to be careful!



WARNING: BEFORE ATTEMPTING TO OPERATE THIS FORAGE BOX, READ AND STUDY THE FOLLOWING SAFETY INFORMATION. IN ADDITION, MAKE SURE THAT EVERY INDIVIDUAL WHO OPERATES OR WORKS WITH THE FORAGE BOX, WHETHER FAMILY MEMBER OR EMPLOYEE, IS FAMILIAR WITH THESE SAFETY PRECAUTIONS.

The emergency stop mechanism stops only the front unloading unit from operating and not the rear unloading operation of the forage box! Trip the emergency stop regularly with the trip cables to ensure that it will shut the front unloading unit down in an emergency.

Require anyone who will operate this forage box to read and completely understand this owner's manual. Give necessary instructions.

DO NOT operate, service, inspect or otherwise handle this forage box until all operators have read this Owner's Manual and have been properly trained in its intended usage.

DO NOT allow minors (children) or inexperienced persons to operate this forage box.

If the forage box becomes clogged, shut off the tractor engine and allow all mechanisms to stop. Disconnect PTO shaft or hydraulic drive supply hoses (relieve hydraulic pressure). Then, clean or work on the forage box as required.

Always shut off power and disconnect PTO shaft or Hydraulic drive supply hoses (relieve hydraulic pressure) from tractor to prevent accidental startup or unexpected movement before working on forage box.

DO NOT clean, adjust or reset the emergency stop while the forage box is in motion.

Make sure all hydraulic fittings are tight and that all hoses are in good condition. Hydraulic fluid escaping under pressure can have sufficient force to penetrate skin and cause serious injury. Never investigate for hydraulic leaks by using a part of the body to feel for escaping fluid.

Inspect when first delivered and regularly thereafter; that all connections and bolts are tight and secure before operating.

Know how to stop the unloading unit of the forage box before starting it!

DO NOT operate until all shields and guards are in place and securely fastened.

Make certain everyone is clear of the forage box before applying power.

Keep hands, feet and clothing away from moving parts. Loose or floppy clothing should not be worn by the operator.

Stay well clear of the cross conveyor and discharge opening while operating.

DO NOT step up on any part of the forage box at any time. DO NOT use the PTO guard as a step.

DO NOT step over the power take-off shaft. Stay clear of the PTO at all times.

Keep PTO shaft telescoping tube shields turning freely. Keep PTO master shield on tractor. Replace damaged or missing shields.

Never operate PTO above normal 540 RPM rating. Never connect forage box PTO shaft to a 1000 RPM tractor PTO.

Keep the forage box away from power lines. Contact with electric lines may result in serious injury or death by electrocution!

Use only properly rated running gear and tires.

DO NOT tow at speeds in excess of 20 MPH when transporting this forage box. Never exceed a safe travel speed.

Observe all applicable traffic laws when transporting on public roadways (where legal to do so). Check local laws for all highway lighting and marking requirements.

Always install a SMV emblem on forage box for transporting on roadways and keep this emblem clean and bright.

MEYER MFG. CORP. PROVIDES GUARDS FOR EXPOSED MOVING PARTS FOR THE OPERATOR'S PROTECTION; HOWEVER, SOME AREAS CAN NOT BE GUARDED OR SHIELDED IN ORDER TO ASSURE PROPER OPERATION. THE OPERATOR'S MANUAL AND DECALS ON THE FORAGE BOX ITSELF WARN YOU OF DANGERS AND MUST BE READ AND OBSERVED CLOSELY!

Study the Above Safety Rules

FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.



SAFETY FIRST

A brief definition of signal words that are used in this manual is as follows:



DANGER indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.



WARNING indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury and includes hazards that are exposed when guards are removed.



CAUTION indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It is also used to alert against unsafe practices.

Warning Push For Emergency Stop

46-0001-14

46-0001-15



46-0001-5



46-0001-26
(INSIDE COVER)



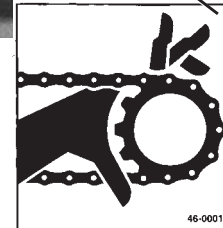
46-0004-2
(ON PTO GUARD)



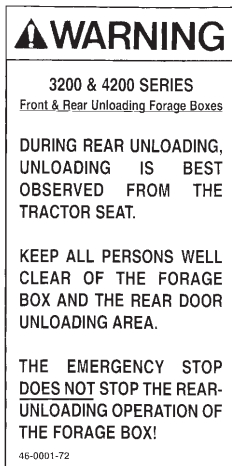
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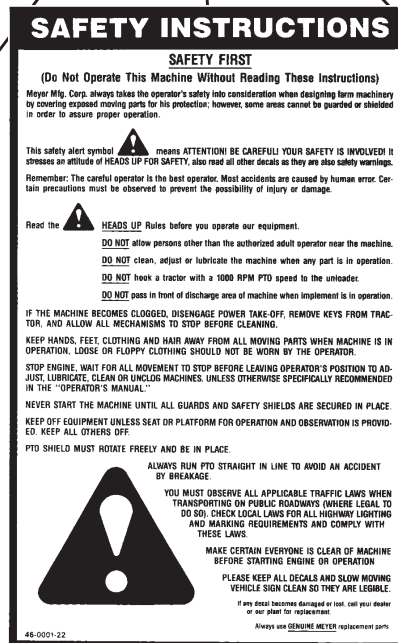
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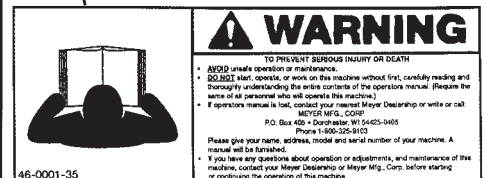
46-0001-72



13-10021-00



46-0001-22



46-0001-35

CAUTION: READ ALL DECALS ON THE FORAGE BOX AND IN THIS MANUAL. KEEP THESE DECALS CLEAN AND REPLACE ANY LOST OR DESTROYED DECALS. BECOME FAMILIAR WITH ALL TRACTOR AND FORAGE BOX CONTROLS.



SAFETY FIRST



The Meyer Forage Box is manufactured with operator safety in mind. Located on the forage box are various decals to aid in operation and warn of danger or caution areas. Pay close attention to all decals on the forage box.



DO NOT REMOVE ANY DECALS. IF DECALS ARE LOST, DAMAGED OR IF FORAGE BOX IS REPAINTED, REPLACE DECALS. REMEMBER: DECALS ARE FOR YOUR PROTECTION AND INFORMATION.



CAUTION: READ ALL DECALS ON THE FORAGE BOX AND IN THIS MANUAL. KEEP THESE DECALS CLEAN AND REPLACE ANY LOST OR DESTROYED DECALS. BECOME FAMILIAR WITH ALL TRACTOR AND FORAGE BOX CONTROLS.



WARNING:



WARNING: IF FOR ANY REASON THE EMERGENCY STOP MECHANISM DOES NOT FUNCTION PROPERLY, DO NOT USE THE MACHINE UNTIL IT IS REPAIRED. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

OPERATION OF THE EMERGENCY STOP

Across the upper edge of the front unloading unit is a “Warning Push For Emergency Stop” pushbar. By pushing on this bar during front unloading operation only, the forage box will shut down in an emergency.

Emergency stop trip cables connected to the “Emergency Stop” pushbar extend along both sides and down the front of the forage box. Pulling on these trip cables will also shut down the front unloading unit of the forage box in an emergency.

Note: The emergency stop mechanism DOES NOT STOP the PTO drive shaft, nor the rear unloading operation of the forage box.



WARNING: THE EMERGENCY STOP MECHANISM STOPS ONLY THE FRONT UNLOADING UNIT FROM OPERATING AND NOT THE REAR UNLOADING OPERATION OF THE FORAGE BOX!

EMERGENCY STOP TRIP LOCATIONS



EMERGENCY STOP TRIP CABLES EXTENDING ALONG BOTH SIDES

EMERGENCY STOP TRIP CABLE AT FRONT

RESETTING THE EMERGENCY STOP



WARNING: DO NOT RESET THE EMERGENCY STOP MECHANISM UNTIL ALL PEOPLE, TOOLS AND OTHER OBJECTS ARE WELL CLEAR OF THE FORAGE BOX. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.



INDEPENDENT OUTFEED CLUTCH CONTROL LEVER

To reset the emergency stop mechanism, fully engage the INDEPENDENT OUTFEED CLUTCH control lever into the “RUN” position.

Check frequently to be assured that the emergency stop mechanism is in proper operating condition. Slowly engage the tractor PTO and operate the forage box at an idle speed to ensure it is operating properly. Push the emergency stop bar across the upper edge of the front unloading unit, to ensure that the forage box can be shut down in an emergency.

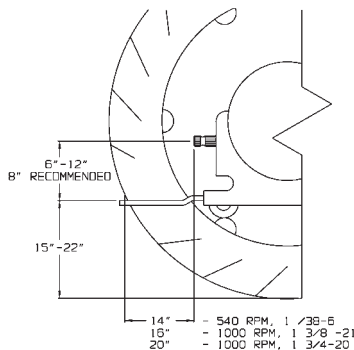
Reset the emergency stop and recheck using the emergency stop trip cables at various locations to ensure that the forage box can be shut down in an emergency. Periodically repeat emergency stop inspections during the operating season and at all times keep excessive slack out of the emergency stop trip cables.

PRE-OPERATION

Be certain your forage box is properly mounted to the running gear. Consult your dealer if you have any questions about the tie down kit from the manufacturer and illustrated in the parts listing of this manual.

DO NOT fill the cross conveyor unloading area with forage to get extra capacity. Overloading puts unnecessary pressures and strains on the cross conveyor and auger drive.

This forage box is to be operated with 540 rpm PTO ONLY. Set your tractor drawbar to conform to the standard dimensions as shown on the following illustration. This will ensure that the PTO drive shaft will not be over extended.



DRAWBAR & PTO RELATIONSHIP

! DANGER: DO NOT OPERATE WITHOUT PTO GUARD ON MACHINE AND ON TRACTOR. MAINTAIN PTO DRIVE SHAFT GUARDS IN OPERATING CONDITION. REPLACE THEM IF DAMAGED AND NOT TURNING FREELY. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

! WARNING: INSPECT REGULARLY THAT ALL CONNECTIONS AND BOLTS ARE TIGHT AND SECURE BEFORE OPERATING. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

Inspect the forage box for proper adjustments as this will ensure maximum machine performance. See "Adjustments" section. Grease and oil the forage box as required. See "Lubrication" section.

! WARNING: DO NOT OPERATE UNTIL ALL SHIELDS AND GUARDS ARE IN PLACE AND SECURELY FASTENED. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

TRANSPORTING

Always disconnect the PTO drive shaft from the tractor and return it to the PTO storage bracket on the unloading unit before transporting. Failure to do this may result in equipment damage.

If you have a fold down cross conveyor extension, always transport with this extension folded up to reduce your width. Check and observe that the rear discharge door is completely latched closed before traveling on roadways.



FOLD DOWN CROSS CONVEYOR EXTENSION

! WARNING

To prevent serious injury or death:

- Read and understand owner's manual before using. Review safety precautions annually.
- No riders allowed when transporting.
- Securely attach to towing unit. Use a high strength appropriately sized hitch pin with a mechanical retainer and attach safety chain.
- Do not exceed 20 mph (33 kph). Slow down for corners and rough terrain.
- Do not drink and drive.
- Before moving running gear, be sure required lights and reflectors are installed and working.
- Before maintenance or repair, stop vehicle, set parking brake, and remove ignition key.
- Place safety stands under frame and chock wheels before working on tires or running gear.
- Maintain wheel bolts at torque as recommended in the manual.
- If equipped with brakes, maintain proper adjustment.

46-0900-2

! WARNING



CRUSHING HAZARD

To prevent serious injury or death:

- Keep hands and body out of hitch area when attaching towing vehicle.
- Keep body clear of crush point between towing vehicle and load.

46-0900-6

! WARNING



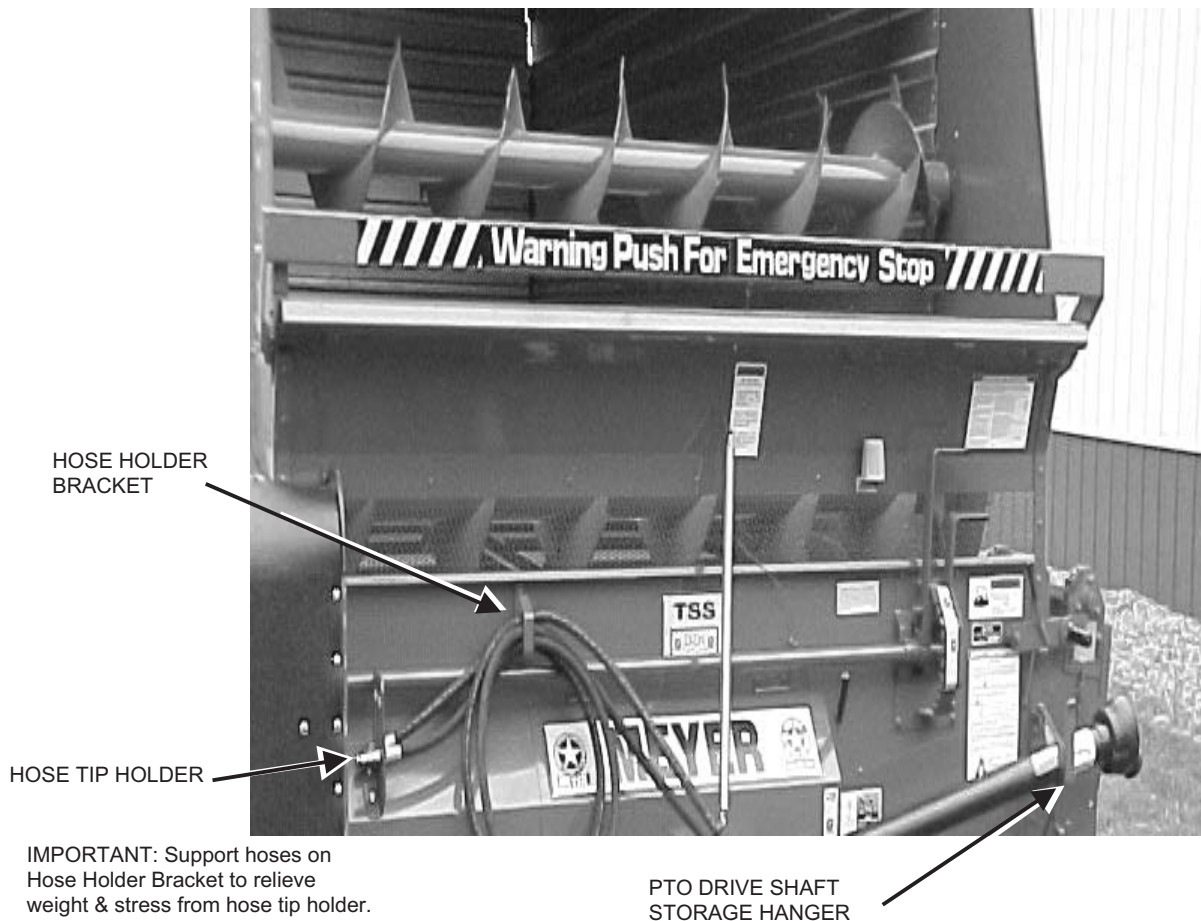
RUN-AWAY HAZARD

To prevent serious injury or death:

- Shift to lower gear before going down steep grades.
- Keep towing vehicle in gear at all times.
- Never exceed a safe travel speed.

46-0900-7

! WARNING: INSTALL A SMV EMBLEM ON REAR OF FORAGE BOX FOR TRANSPORTING ON ROADWAYS. KEEP THIS EMBLEM CLEAN AND BRIGHT. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.



PROPER PTO DRIVE SHAFT AND HYDRAULIC HOSE STORAGE

Your running gear probably has a telescoping tongue for convenience to hitch up. Always back up and lock this tongue in the operating position after hitching.

! WARNING: YOU MUST OBSERVE ALL APPLICABLE TRAFFIC LAWS WHEN TRANSPORTING ON PUBLIC ROADWAYS. CHECK LOCAL LAWS FOR ALL HIGHWAY LIGHTING AND MARKING REQUIREMENTS. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

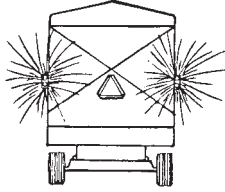
! WARNING: DO NOT TOW AT SPEEDS IN EXCESS OF 20 MPH. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

Operating speed is dictated by the terrain over which you are traveling. Always use caution. Avoid traveling on slopes or hills that are unsafe.

If you will travel on public roads and it is legal to do so, you must know all rules governing such operation. This will include lighting and brake requirements in addition to

traffic rules. You will also be required to install a safety chain device on the running gear.

! CAUTION: USE FLASHING WARNING LIGHTS WHEN TRANSPORTING ON ALL PUBLIC ROADWAYS, EXCEPT WHEN PROHIBITED BY LAW.

 <p>By all State and Federal laws, implement lights do not replace the SMV (Slow-Moving Vehicle) Identification Emblem. All towed agricultural vehicles must display SMV Emblems when traveling LESS than 25 mph (40 Km/h).</p>	<p>! CAUTION</p> <p>Use Flashing Warning Lights when transporting on <u>ALL</u> highways (public roadways) at <u>ALL</u> times.</p> <p>EXCEPT WHEN PROHIBITED BY LAW!</p> <p>(Check w/local law enforcement)</p> <p>4G-0001-62</p>
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Check for traffic constantly. Be sure you can see that no one is attempting to pass you and that all traffic is sufficiently clear from you before making any turns.

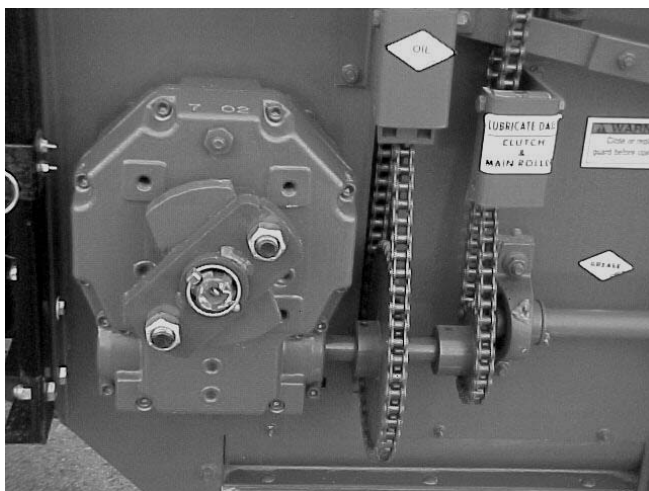
Truck Mount Forage Boxes

Depending on the make and model of truck it may be necessary to install a light converter (MEYER PART #56-0028.) Converter will allow signal lights and brake lights to operate according to DOT lighting standard. Call factory for more information.

FRONT UNLOAD DRIVE COUPLER “SET-UP” (PTO OR HYDRAULIC DRIVE)

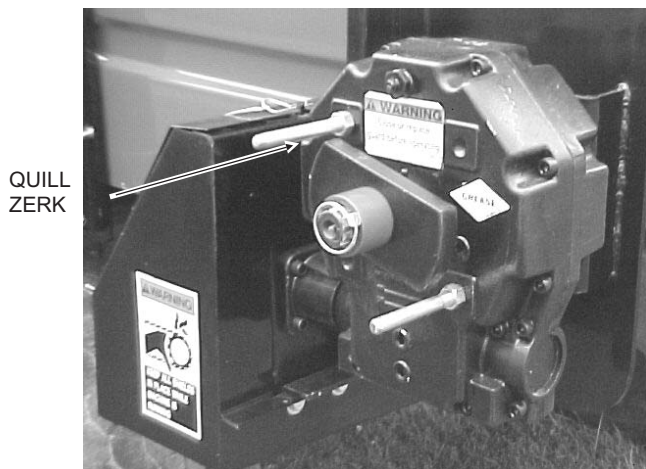


WARNING: DISCONNECT PTO DRIVE SHAFT AND HYDRAULIC HOSES (RELIEVE HYDRAULIC PRESSURE) BEFORE CLEANING, ADJUSTING, LUBRICATING OR SERVICING THIS FORAGE BOX. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.



(Shield Removed For Illustration Purposes Only)

COUPLING PLATE



(Shield Removed For Illustration Purposes Only)

SLEEVE SPACER



WARNING: DO NOT OPERATE WITHOUT ALL SHIELDS, GUARDS AND COVERS INSTALLED. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

STEP 1

Install Coupling Plate and lynch pin onto the large gear-box assembly, splined shaft at the FRONT of the forage box.

STEP 2

IMPORTANT! (MUST PERFORM)

Install sleeve spacer and lynch pin onto the hydraulic drive gearbox at the REAR of the forage box. The internal splined shaft will be idling in reverse and the gearbox quill zerk must be greased daily.



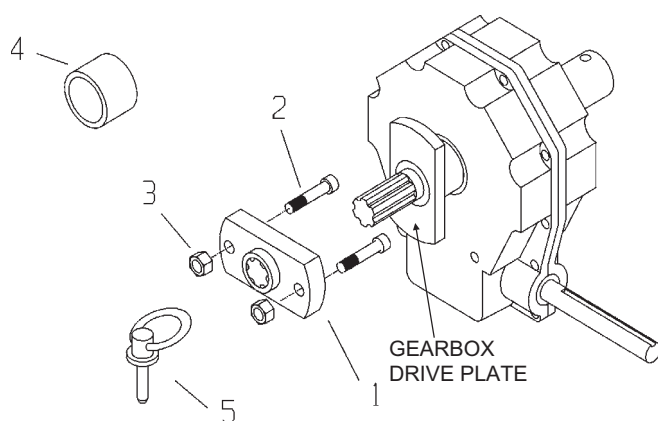
STEP 3

Move the lever for PTO drive rear unloading to the “Disengage” position (UP).

(Shield Removed For Illustration Purposes Only)
PTO DRIVE REAR UNLOAD DISENGAGE LEVER

Operating Procedures: See Front Unload “VARIABLE SPEED OPERATION with IOC”
Page 15

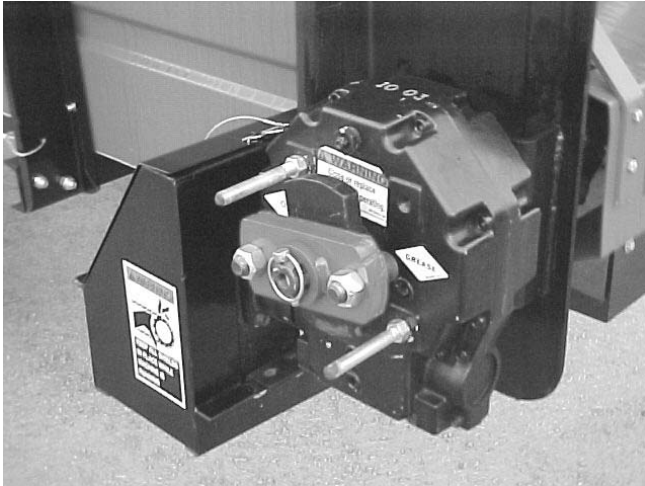
#37-0010 COUPLING PLATE ASSEMBLY COMPLETE



KEY	PART NO.	DESCRIPTION
1	37-0010-4	Coupler Plate
2	831-7516-2	Drive Bolt, 3/4-16 x 2 Allen Head GR8
3	884-7516-Z	3/4-16 Flange Top Lock Nut
4	43-0020	Idler Sleeve Spacer
5	823-0002	Lynch Pin

REAR UNLOAD DRIVE COUPLER “SET-UP” (PTO OR HYDRAULIC DRIVE)

! WARNING: DISCONNECT PTO DRIVE SHAFT AND HYDRAULIC HOSES (RELIEVE HYDRAULIC PRESSURE) BEFORE CLEANING, ADJUSTING, LUBRICATING OR SERVICING THIS FORAGE BOX. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

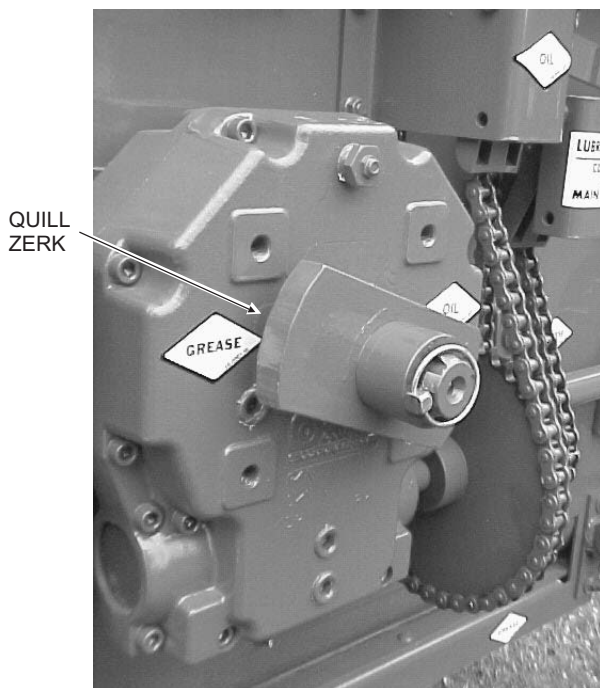


(Shield Removed For Illustration Purposes Only)

COUPLING PLATE

STEP 1

Install Coupling Plate and lynch pin onto the large gear-box assembly on the splined shaft at the REAR of the forage box.



SLEEVE SPACER

(Shield Removed For Illustration Purposes Only)

STEP 2 IMPORTANT! (MUST PERFORM)

Install sleeve spacer and lynch pin onto the large gear-box assembly, splined shaft at the FRONT of the forage box. The internal splined shaft will be idling in reverse and the gearbox quill zerk must be greased daily.

! WARNING: DO NOT OPERATE WITHOUT ALL SHIELDS, GUARDS AND COVERS INSTALLED. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.



INDEPENDENT OUTFEED CLUTCH LEVER

STEP 3

Move the Independent Outfeed Clutch lever to "STOP" (UP).

NOTE: The PTO driven independent outfeed clutch can be used to clean out accumulation of forage from the front unit cross conveyor without changing the drive coupler for forage box rear unloading.



(Shield Removed For Illustrated Purposes Only)

PTO DRIVE REAR UNLOAD ENGAGE LEVER

STEP 4a (PTO DRIVE) or

Move the lever for PTO drive rear unloading to the "ENGAGE" position (DOWN).



HYDRAULIC CHECK VALVE AT REAR OF BOX

STEP 4b (HYDRAULIC DRIVE)

Couple both supply and return line hydraulic hoses of the forage box to the hydraulic outlets of the towing tractor.

NOTE: The rear unloading gearbox and hydraulically driven motor, hydraulic return line features a check valve to protect and prevent any accidental damage by mistakenly, or incorrectly coupling hydraulic hoses to the tractor. The check valve is equipped with a reverse flow feature which will allow the box to run in a reverse direction for drive plate removal. Reverse hydraulic flow approximately 10-15 seconds to rotate gearbox drive plate away from the removable drive plate. **DO NOT RUN IN REVERSE FOR UNLOADING!**

Operating Procedures: See "REAR UNLOAD OPERATION" (HYD or PTO) Page 18

FRONT UNLOAD VARIABLE SPEED OPERATION WITH INDEPENDENT OUTFEED CLUTCH

DECAL #46-0001-64

FORAGE BOX CONTROL LEVERS



WARNING: NEITHER THE VARIABLE SPEED NOR THE HI-LO RANGE CONTROL LEVER WILL DISENGAGE THE CROSS CONVEYOR. ONLY THE TRACTOR PTO, INDEPENDENT OUTFEED CLUTCH, OR EMERGENCY STOP MECHANISM WILL STOP THE CROSS CONVEYOR. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

Facing the front of the forage box, the lower most RH control lever is the INDEPENDENT OUTFEED CLUTCH control. Moving this control lever down into the “Run” position engages the cross conveyor and main drive mechanism. Engage this control lever into the “Run” position for normal operation. Once this control lever is engaged, it acts as the emergency stop when pushing on the “Warning Push for Emergency Stop” push bar or when pulling on the emergency stop trip cables.

The LH control lever is the VARIABLE SPEED control. Moving this control lever regulates rotational speed of the unloading augers and the forward speed of the main apron chains, in conjunction with the HI-LO RANGE control. At the uppermost notch on the control quadrant, the VARIABLE SPEED control is in “Neutral” position. In this position, neither the main apron chains advance, nor do the unloading augers rotate under load, regardless of the position of the HI-LO RANGE control. Moving the VARIABLE SPEED control lever down on the control quadrant increases speed of both auger rotation and main apron chain forward travel.

The RH control lever is the HI-LO RANGE control. Center detent is the “Neutral” position. Shifting the lever up on the control quadrant is “LO” RANGE and shifting the lever fully down is “HI” RANGE. Range selection affects the forward speed of the main apron chains only. In the “Neutral” position, the main apron chain does not travel forward.

OPERATING PROCEDURE

NOTE: The VARIABLE SPEED, HI-LO RANGE, and OUTFEED CLUTCH levers must be in the “Neutral” position when engaging and disengaging the PTO drive shaft (or optional hydraulic drive). All forage box control lever selections are to be made while the PTO (or hydraulic) power is in operation. If the control levers are engaged before power is applied, damage may occur to the Variable Speed drive and the Outfeed Clutch drive. Failure to follow correct operating procedures may cause equipment damages and void the manufacturers warranty.

1. Park the forage box so the discharge cross conveyor is in alignment with the silo filling blower hopper. Park the forage box and tractor in a straight line to prevent wearing of PTO drive shaft joints. Lower forage box cross conveyor extension if equipped.

2. Check that the OUTFEED CLUTCH lever is in the “Stop” position, and the VARIABLE SPEED & HI-LO RANGE levers are in the “Neutral” position.

3. Slowly engage the tractor PTO and set the engine speed from 1300-1500 rpm, which should give a PTO speed of 330-375 rpm.

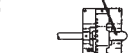
4. Slowly engage the OUTFEED CLUTCH lever to the “RUN” position and allow the cross conveyor to empty out any accumulation of forage in the front unit of the forage box. After the forage has emptied, fully engage and lock down the OUTFEED CLUTCH lever into the “RUN” position.

5. Slowly engage the VARIABLE SPEED lever to clear forage from the three unloading augers. Quickly, but gradually engage and disengage this lever as needed to fine tune the augers from forage, and then keep the augers turning.

6. With the Variable Speed lever in a slow speed selection, slowly engage the HI-LO Range lever to “LO” and the main aprons will begin to move forward. Increase speed of the Variable Speed lever to regulate rate of forage box unloading speed to match capacity of silo filling blower. **DO NOT START AND UNLOAD FULL LOADS IN “HI” RANGE!** Use “HI” RANGE for main apron “cleanout” all small or partial loads.

7. When unloading is complete, slowly return the VARIABLE SPEED lever to the “Neutral” position and then the HI-LO RANGE lever to the “Neutral” position. Then, disengage the OUTFEED CLUTCH lever to the “STOP” position. Idle down the tractor engine rpm and shut off the tractor PTO lever. Disconnect the PTO shaft from the tractor and secure it in the PTO hanger bracket at the front of the forage box. If the forage box is equipped with a cross conveyor extension, raise it up to the transport position.

HI-LO RANGE LEVER



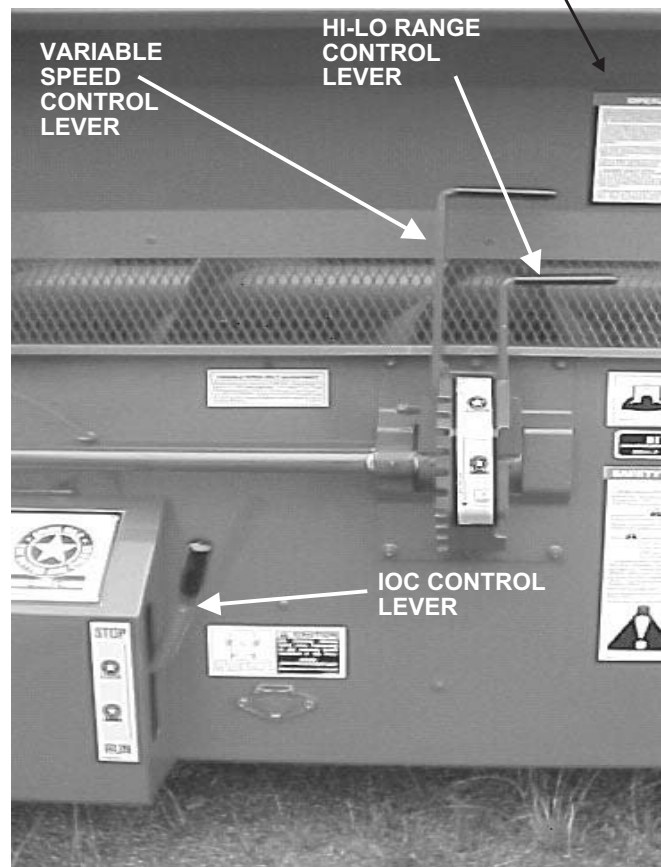
VARIABLE SPEED LEVER



OUTFEED CLUTCH LEVER



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Three levers control operating the front unloading unit of the forage box.

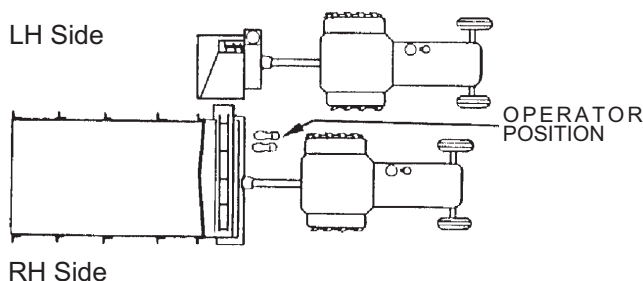
1. INDEPENDENT OUTFEED CLUTCH - IOC
2. VARIABLE SPEED
3. “HI-LO RANGE”

UNLOADING THE FORAGE BOX

Pull the forage box into position and park so that the cross conveyor discharge opening is in alignment with the silo filling blower hopper. If the forage box is equipped with a fold down cross conveyor extension, it can be lowered before pulling in front of the blower. After a couple of parking trials, you may become familiar with the correct parking place and be able to lower the cross conveyor extension after parking. Always park the forage box and unloading tractor in a straight line. Minimize the unloading angle on the PTO drive shaft to prevent wearing of universal joints when connected to the unloading tractor PTO. Shift the unloading tractor to "Neutral" or "Park" and set the brakes.

NOTE: Normal operation is using a farm tractor. If using some other vehicle, exercise equivalent caution when parking and exiting this vehicle.

Properly dismount from the tractor and approach the forage box by walking along the left side of the tractor as shown in the following diagram. Do not approach the forage box from the right side of the machine (left hand unload). Approach the left front area of the forage box, as this is where the control levers are located. Standing in the operator position will not require crossing the PTO drive shaft at any time during the unloading operation.



OPERATOR TRAFFIC PATTERN



WARNING: DO NOT STEP OVER THE PTO DRIVE SHAFT. STAY WELL CLEAR OF THE PTO AT ALL TIMES. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.



WARNING: DO NOT STEP UP ON ANY PART OF THE FORAGE BOX AT ANY TIME. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

START UP PROCEDURES

Remove PTO drive shaft from the forage box PTO storage bracket and connect to the tractor PTO. Be sure the PTO yoke is securely locked to the tractor PTO. If using an optional hydraulic drive, couple the hydraulic hoses to the power supply.

Check that the INDEPENDENT OUTFEED CLUTCH control lever is in the "Stop" position and the VARIABLE SPEED & HI-LO RANGE control levers are in the "Neutral" positions.

NOTE: The INDEPENDENT OUTFEED CLUTCH, VARIABLE SPEED, and HI-LO RANGE control levers must be in their "Stop" or "Neutral" positions when engaging and disengaging the PTO drive shaft (or optional hydraulic drive). All forage box control lever selections are to be made while the PTO (or hydraulic) power is in operation. If the control levers are engaged before power is applied, damage may occur to the Variable Speed drive or Independent Outfeed Clutch drive or both. Failure to follow **correct** operating procedures may cause equipment damage and may void the manufacturer's warranty.

At this time, start the silo filling blower. Return to the forage box unloading tractor, slowly engage the PTO, and set the engine speed from 1300-1500 rpm. to give a PTO speed of 300-375 rpm.

Return to the operator's position adjacent to the forage box controls. Intermittently engage the INDEPENDENT OUTFEED CLUTCH control lever to the "Run" position and allow the cross conveyor to empty out any accumulation of forage in the front unloading unit. After the forage has emptied, fully engage the INDEPENDENT OUTFEED CLUTCH control lever into the "Run" position.

Next, engage the VARIABLE SPEED control lever to clear forage from the three unloading augers. Intermittently move the lever between "Neutral" and the 1st and/or 2nd notch settings on the control quadrant. This will engage and disengage the augers at a slow speed to clear them without the main apron moving forward; because the HI-LO RANGE control lever is still in "Neutral."

With the augers cleared and running and the VARIABLE SPEED control lever in a slow speed setting, move the RANGE control lever to "LO" and the main apron chain will begin to move forward. Moving the VARIABLE SPEED control lever down on the control quadrant will increase speed of both auger rotation and main apron forward travel. Keep increasing speed of the VARIABLE SPEED control to regulate rate of forage box unloading speed to match the capacity of the silo filling blower.

Slow up, but do not stop the VARIABLE SPEED control when shifting to “HI” RANGE.



CAUTION: YOU CAN MOVE THE RANGE CONTROL LEVER TO “HI” FOR CLEAN-OUT AT THE END OF UNLOADING AND YOU MAY ALSO FIND IT TO BE AN APPROPRIATE SPEED SELECTION FOR SMALL OR PARTIAL LOADS. DO NOT START AND UNLOAD FULL LOADS IN “HI” RANGE.

NOTE: Control lever settings must be made while the forage box front unloading unit is in operation. Moving the control levers with the unloading unit stopped will be difficult or impossible. This may cause equipment damages and may void the manufacturer’s warranty.

When finished unloading the forage box, perform the “Shut Down Procedures.”

SHUTDOWN PROCEDURES

For proper operation, it is **IMPORTANT** that when unloading is completed to slowly return the VARIABLE SPEED control lever to the “Neutral” position and then the HI-LO RANGE control lever to the “Neutral” position. Then, disengage the INDEPENDENT OUTFEED CLUTCH control lever to the “Stop” position. This will prepare the forage box front unloading unit for proper “start-up” on the next load of forage.

NOTE: Control lever settings must be made while the forage box front unloading unit is in operation. Moving the control levers with the unloading unit stopped will be difficult or impossible. This may cause equipment damages and may void the manufacturers warranty.

Idle down the tractor engine rpms. Disengage the PTO drive shaft and turn the tractor “OFF.” When all movement has stopped, disconnect the PTO drive shaft from the forage box unloading tractor and return it to the PTO storage bracket. Secure the PTO drive shaft into the PTO storage bracket with the rubber tie down strap. Shut down the silo filling blower tractor and wait for all motion to stop. If the forage box is equipped with a cross conveyor extension, raise it up to the transport position and securely latch it before traveling on roadways.

The unloading process described is to be performed by the operator alone. This will eliminate unexpected “start-ups” and minimize other hazards that could result by more than one person in control. If the forage box or silo filling blower should become clogged, shut off all power to the forage box and blower. Wait for all motion to stop. Disconnect PTO drive shaft or hydraulic supply and return hoses. Then, clean out the machine.

Never use “live” power to aid in the clean-out of a clogged machine. If any mechanism fails, move the forage box to a safe work area and then repair the mechanism before proceeding with unloading of the forage. If repairs require the removal of forage from inside of the forage box, then remove the rear discharge door (bolted hinges on top of each side) and then empty the forage manually by hand through the rear opening.

HINGE
BOLTS



REAR
DISCHARGE
DOOR

REAR OPENING DISCHARGE DOOR



CAUTION (QUICK RELEASE!)



DANGER: NEVER ENTER THE FORAGE BOX OR FRONT UNLOADING UNIT FOR ANY REASON WITHOUT FIRST DISCONNECTING PTO DRIVE SHAFT OR HYDRAULIC HOSES FROM POWER SUPPLY. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

Never enter the forage box for any reason if there is any possibility of power being applied to the unit.

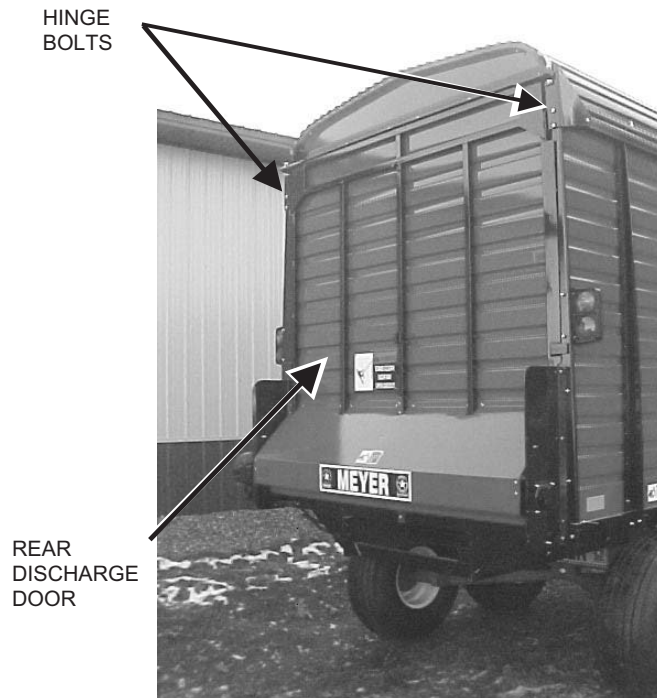
REAR UNLOAD OPERATION PTO OR HYDRAULIC DRIVE

⚠ WARNING: MAKE CERTAIN EVERYONE IS WELL CLEAR OF EQUIPMENT BEFORE APPLYING POWER. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

Always park the forage box and unloading tractor in a straight line. Minimize the unloading angle on the PTO drive shaft to prevent wearing of universal joints when connected to the unloading tractor PTO. Shift the unloading tractor to "Neutral" or "Park" and set the brakes.

NOTE: Normal operation is using a farm tractor. If using some other vehicle, exercise caution when parking and exiting this vehicle.

Remove the PTO drive shaft from the forage box PTO storage bracket and connect it to the tractor PTO. Be sure the PTO yoke is securely locked to the tractor PTO. Move the Independent Outfeed Clutch control lever to the "Stop" position. If using a hydraulic drive, couple the hydraulic hoses to the power supply. Be sure the hydraulic hoses are securely locked to the tractor hydraulic couplers.



REAR OPENING DISCHARGE DOOR

⚠ CAUTION (QUICK RELEASE!)

Make sure all persons are well clear of the forage box and the unloading area.

The rear discharge door opens automatically by releasing its latches as the main aprons begin to move. The rear discharge door can spring open with extreme force when its latches release. Pressure of forage against the rear door causes it to spring open very quickly.

⚠ WARNING: THE REAR DISCHARGE DOOR CAN SPRING OPEN QUICKLY AND WITH EXTREME FORCE. KEEP ALL PERSONS WELL CLEAR OF THE FORAGE BOX AND UNLOADING AREA. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

Return to the tractor, restart, and **SLOWLY** engage the tractor PTO or hydraulics to start the apron chains and to open the rear door. Once the door opens, regulate the discharge flow with the tractor engine speed. Do not operate above rated tractor engine RPM speed.

Unloading is best observed from the tractor seat. Keep moving the forage box forward to prevent silage from being carried underneath into the main apron chain return area.



REAR DISCHARGE DOOR LATCH
(Typical both sides)



WARNING: DO NOT STEP UP ON ANY PART OF THE FORAGE BOX AT ANY TIME. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

When finished unloading, reduce engine speed to idle and disengage the tractor PTO or hydraulics. Pull the forage box straight ahead to pull the rear door away from the unloaded pile of forage. Gravity will allow the rear door to swing shut. The rear door latches will engage to secure it closed. Visibly observe that rear discharge door properly latches close.

The unloading process described is to be performed by the operator alone. This will eliminate unexpected “start-ups” and minimize other hazards that could result by more than one person in control. If the forage box should become clogged, shut off all power to the forage box and wait for all motion to stop. Disconnect PTO drive shaft or hydraulic supply and return hoses and then clean out the machine.

Never use “live” power to aid in the clean-out of a clogged machine. If any mechanism fails, move the forage box to a safe work area and then repair the mechanism before proceeding with unloading of the forage. If repairs require removal of forage from inside of the forage box, then remove the rear discharge door (bolted hinges on top of each side) and then empty the forage manually by hand through the rear opening.



DANGER: NEVER ENTER THE FORAGE BOX OR FRONT UNLOADING UNIT FOR ANY REASON WITHOUT FIRST DISCONNECTING THE PTO DRIVE SHAFT OR HYDRAULIC HOSES FROM POWER SUPPLY. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

Never enter the forage box for any reason if there is any possibility of power being applied to the unit.

HINGE
BOLTS

REAR
DISCHARGE
DOOR



REAR OPENING DISCHARGE DOOR



CAUTION (QUICK RELEASE!)

LUBRICATION



WARNING: DISCONNECT PTO DRIVE SHAFT (OR HYDRAULIC POWER SOURCE) BEFORE CLEANING, ADJUSTING, LUBRICATING OR SERVICING THIS MACHINE. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

DAILY LUBRICATION

(every 8-10 loads)

- (L1) Grease (2) PTO drive shaft universal joints (not illustrated). Grease (1) PTO drive shaft telescoping shaft and tube. Zerk accessible through the plastic guards (not illustrated).
- (L2) Grease front idler sprocket - wipe off excess grease from exterior.
- (L3) Grease (2) moveable clutch sheaves - wipe excess from interior and exterior. Prevent oil and grease from getting on clutch sheave belt drive surface.
- (L4) Apply grease to lower cluster shaft end and lower variable speed engagement arm.
- (L5) Oil (2) roller chains and "HI-LO" range sliding jaw clutch.
- (L6) Grease "HI-LO" range brass shifting collar.
- (L7) Oil (2) roller chains on auger drive and (1) roller chain on cross conveyor drive. Oil the middle and upper auger drive roller chains through slots provided in the chain shields.
- (L8) Grease (2) gearbox hollow output shaft zerks (1 Front, 1 Rear - zerk located behind coupling plate).

BEGINNING OF CROP MAINTENANCE

(approximately 100-150 loads)

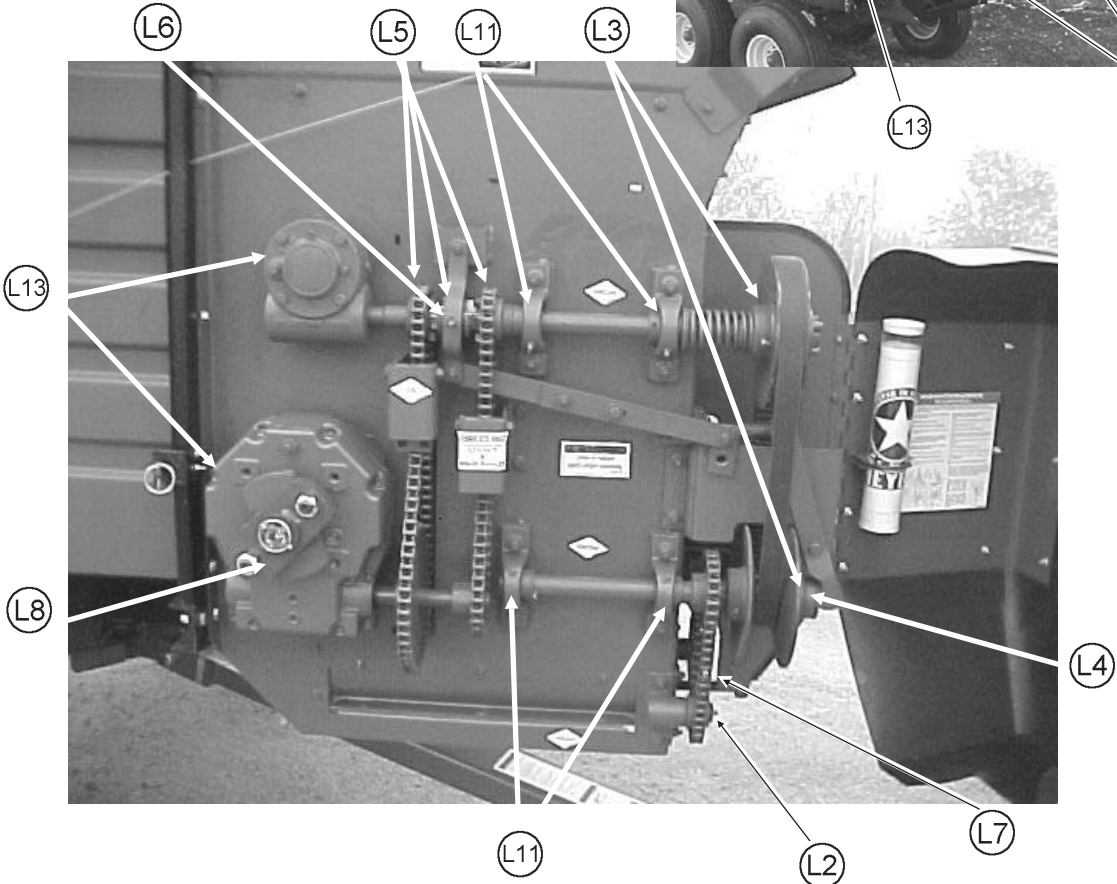
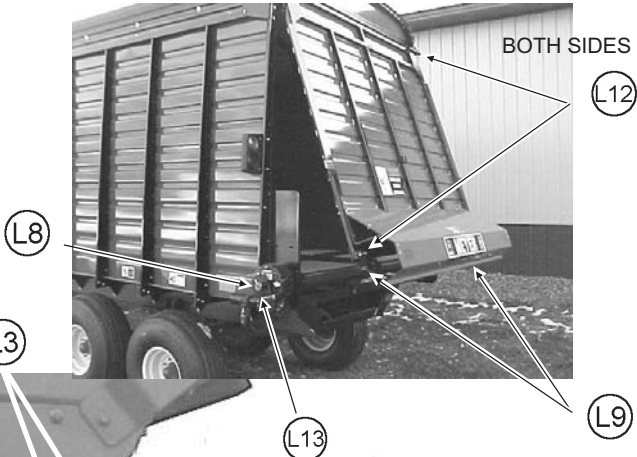
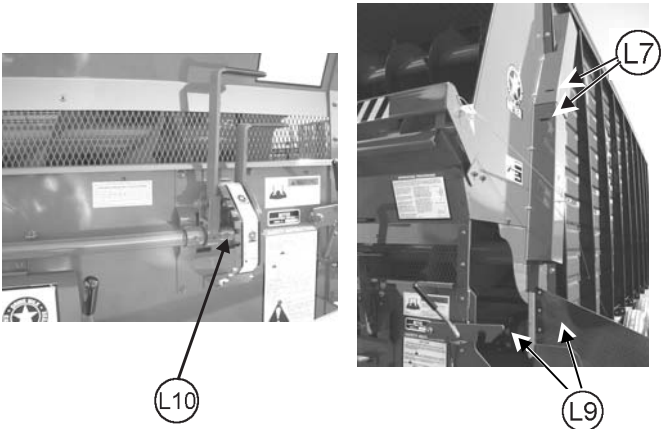
- (L9) Grease (4) main apron shaft bearings (2 Front, 2 Rear) (Front center bearing grease from zerk in left end frame).
- (L10) Grease (3) shifter control lever guide sleeves. Grease (1) Independent Outfeed Clutch handle pivot under front shield.
- (L11) Grease (4) gear cluster shaft bearings.
- (L12) Grease (2) rear gate hinges. Oil (2) rear gate latch pivot bolts.
- (L13) Maintain oil in the (3) gear boxes at the check plug level. Change oil in the gear boxes after the first season of use and yearly thereafter. Use #85W140 wt. Gear Lube Oil. Lighter oil may be used in temperatures lower than 20° F.
- (A1) Adjust main apron chain per "Adjustments" section. Adjust cross conveyor chain per "Adjustments" section.
- (A2) Adjust shifter controls per "Adjustments" section.
- (A3) Remove panel and clean out accumulation of foreign material build-up.

END OF CROP CLEANUP AND MAINTENANCE

Allow box to completely clean out last load of forage. Clean out all forage material from inside the box, roof and on the outside of the box. Clean the front cross conveyor on the top pan and in the lower pan (chain return) area. Clean out the clean-out panel. Clean out the deflector shield at the rear of the box, both inside and outside.

It is recommended to lube the forage box before storage to exclude moisture from bearings. Apply oil to roller chain drives and to the main apron chains and cross conveyor chains. Also, new or used oil is recommended to be applied to the floor and inside of the box walls.

It is also a good time to inspect all adjustments and check for parts that need repair or replacement. Performing these tasks now will guarantee that the forage box is ready for use at the beginning of the next season.



LUBRICATION DIAGRAMS (Shields Removed for Illustration Purposes Only)

TWO-SPEED OPERATION

CONTROL LEVER



WARNING: THE RANGE CONTROL LEVER DOES NOT STOP THE CROSS APRON. ONLY THE TRACTOR PTO OR THE EMERGENCY STOP MECHANISM WILL STOP THE CROSS CONVEYOR. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.



RANGE CONTROL LEVER

The unloading of the forage box is controlled by the range control lever and the tractor PTO speed.

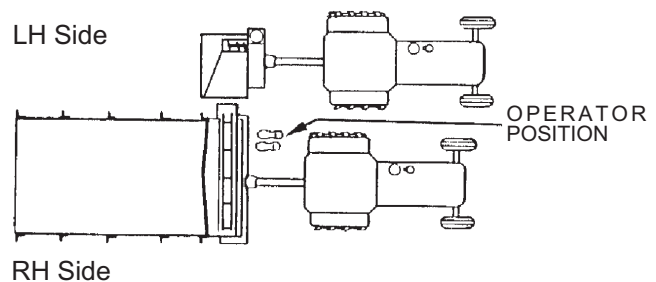
Center detent on the range control is “NEUTRAL”, up is “LOW” and down is “HIGH” range. Range selection affects the forward speed of the main apron chain only. In neutral, the apron does not advance.

UNLOADING THE FORAGE BOX

Pull the forage box into position and park so that the cross conveyor discharge opening is in alignment with the silo filling blower hopper. If the forage box is equipped with a fold down conveyor extension, it can be lowered before pulling in front of the blower. After a couple of parking trials, you may become familiar with the correct parking place and be able to lower the cross conveyor extension after parking. Always park the forage box and unloading tractor in a straight line. Minimize the unloading angle on the PTO drive shaft to prevent wearing of universal joints when connected to the unloading tractor PTO. Shift the unloading tractor to “Neutral” or “Park” and set the brakes.

NOTE: Normal operation is using a tractor. If using some other vehicle exercise equivalent caution when parking and exiting this vehicle.

Properly dismount from the tractor and approach the forage box by walking along the left side of the tractor as shown in the following diagram. Do not approach the forage box from the right side of the machine (left hand unload). Approach the left front area of the forage box, as this is where the control levers are located. Standing in the operator position will not require crossing the PTO drive shaft at any time during the unloading operation.



OPERATOR TRAFFIC PATTERN



WARNING: DO NOT STEP OVER THE PTO DRIVESHAFT. STAY WELL CLEAR OF THE PTO AT ALL TIMES. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.



WARNING: DO NOT STEP UP ON ANY PART OF THE FORAGE BOX AT ANY TIME. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OF DEATH.

START UP PROCEDURES:

Remove the PTO drive shaft from the forage box PTO storage bracket and connect it to the tractor PTO. Be sure the PTO yoke is securely locked to the tractor PTO. If using an optional hydraulic drive, couple the hydraulic hoses to the power supply.

Check that the INDEPENDENT OUTFEED CLUTCH control lever is in the “Stop” position and the HI-LO RANGE control lever is in the “Neutral” position.

NOTE: The INDEPENDENT OUTFEED CLUTCH and HI-LO RANGE control levers must be in their “Stop” or “Neutral” positions when engaging and disengaging the PTO drive shaft (or optional hydraulic drive). All forage box control lever selections are to be made while the PTO (or hydraulic) power is in operation. If the control levers are engaged before power is applied, damage may occur to the Independent Outfeed Clutch drive. Failure to follow correct operating procedures may cause equipment damage and may void the manufacturer’s warranty.

At this time, start the silo filling blower. Return to the forage box unloading tractor, slowly engage the PTO, and set the engine speed from 1300-1500 rpm. to give a PTO speed of 300-375 rpm.

Return to the operator’s position adjacent to the forage box controls. Intermittently engage the INDEPENDENT OUTFEED CLUTCH control lever into the “Run” position and allow the cross conveyor to empty out any accumulation of forage in the front unloading unit. After the forage has emptied, fully engage the INDEPENDENT OUTFEED CLUTCH control lever into the “Run” position.

Next, move the RANGE control lever to “LO” and the main apron chain will begin to move forward.

IMPORTANT: YOU CAN MOVE THE RANGE CONTROL LEVER TO “HI” FOR CLEAN-OUT AT THE END OF UNLOADING AND YOU MAY ALSO FIND IT TO BE AN APPROPRIATE SPEED SELECTION FOR SMALL OR PARTIAL LOADS. DO NOT START AND UNLOAD FULL LOADS IN “HI” RANGE.

NOTE: Control lever settings must be made while the forage box front unloading unit is in operation. Moving the control levers with the unloading unit stopped will be difficult or impossible. This may cause equipment damages and may void the manufacturer’s warranty.

When finished unloading the forage box, perform the “Shut Down Procedures.” Refer to page 17.

TWO SPEED LUBRICATION AND MAINTENANCE



WARNING: DISCONNECT PTO DRIVE SHAFT (OR OPTIONAL HYDRAULIC POWER SOURCE) BEFORE CLEANING, ADJUSTING, LUBRICATING OR SERVICING THIS MACHINE. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

ROLLER CHAIN DRIVES

The roller chain drives are tensioned by automatic spring loaded tension blocks.

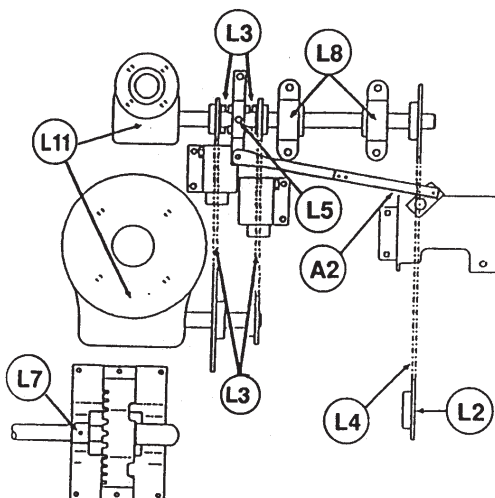
RANGE CONTROL CLUTCH ENGAGEMENT

With the range control lever set to neutral, the engaging jaw clutch should be about midway between the “LO and “HI” sprocket clutch jaws on the splined shaft. Neither should be engaged. When the lever is moved to “LO” the engaging jaw clutch should mate with “LO” speed sprocket clutch and have about 1/16” of clearance. Likewise for the “HI” speed when the lever is moved to “HI”. This engagement is adjusted by changing the length of over-lap on the two, slotted hole linkage bars.

DAILY LUBRICATION MAINTENANCE

(every 8-10 loads)

- (L1) Grease PTO drive shaft joints (not illustrated).
- (L2) Grease front idler sprocket - wipe off excess grease from exterior.
- (L3) Oil roller chains and HI-LO range jaw clutch.



(L4)

Oil roller chains on auger drive and cross conveyor drive. Oil through slots provided in the chain shields.

(L5)

Oil or grease HI-LO range brass shifting collar.

BEGINNING OF CROP MAINTENANCE

(approximately 100-150 loads)

(L6)

Grease main shaft bearings.

(L7)

Grease range control sleeve.

(L8)

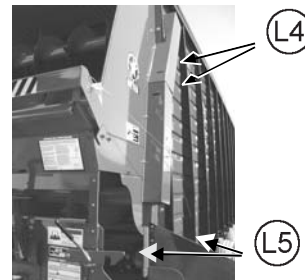
Grease gear cluster shaft bearings.

(L11)

Maintain oil level in gear boxes. See L13, page 20.

(A2)

Adjust range control per “Clutch Engagement”.



END OF CROP CLEANUP AND MAINTENANCE

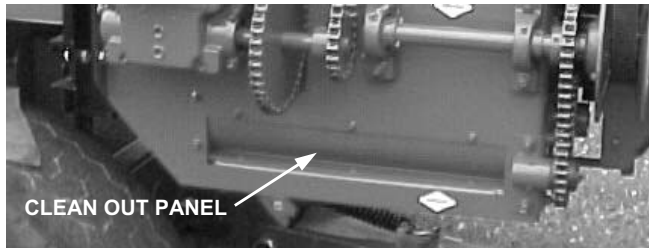
Clean out all forage material from inside the box, roof, and on the outside of the box. Clean the front cross apron on the top and in the lower pan (chain return) area. Clean out the deflector shield at the rear of the box, both inside and outside.

New or used oil is recommended to be applied to the floor and inside of the box walls. Also coat all apron chains and slats with oil.

ADJUSTMENTS



WARNING: DISCONNECT PTO DRIVE SHAFT (OR HYDRAULIC POWER SOURCE) BEFORE CLEANING, ADJUSTING, LUBRICATING OR SERVICING THIS MACHINE. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.



CLEAN-OUT PANEL

Remove clean-out panel on a regular basis to clean out accumulation of foreign material build-up. Keep this area clean for proper cross conveyor chain operation.

CROSS CONVEYOR CHAIN WITH CROSS APRON HOLD DOWNS

Correct adjustment of the cross apron chain occurs when 12" of chain, APRON SLAT does not touch the BOTTOM PAN of the cross apron return area at the discharge opening. To tighten the chain, loosen the two bolts securing the slotted bearing bracket at each side of the discharge opening. Tighten the chain by tightening the nut on the adjuster bolt. Adjust both sides equally. Retighten the bearing bracket bolts.

MAIN APRON CHAINS

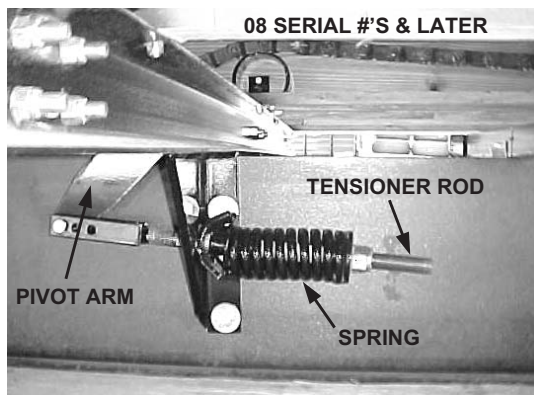
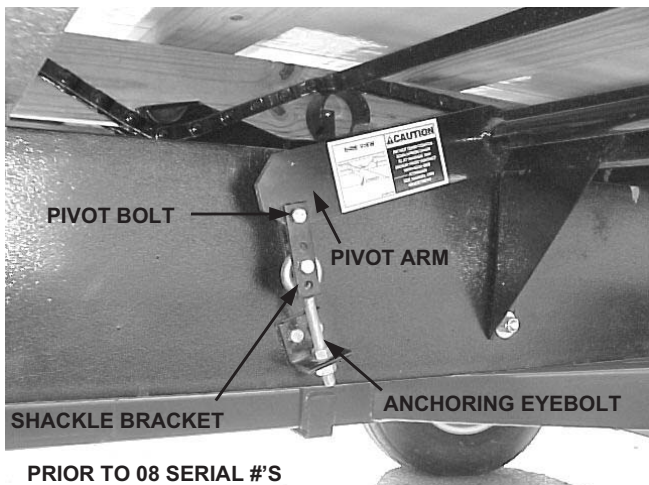
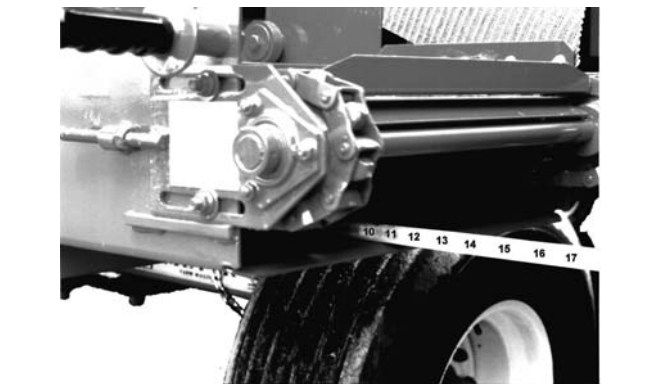
After unloading the first ten loads from the front and also after unloading the first ten loads from the rear check the main apron chain tension. After initial adjustment check chain tension daily for the next five days of operation. Initial wear in of chain will require adjustment to maintain proper chain tension. **FAILURE TO MAINTAIN PROPER CHAIN TENSION MAY VOID WARRANTY.** Removable master links are included in each of the four strands for tightening after tightener travel is at its maximum. Remove a link from each of the four strands at the same time to assure proper timing.

The main aprons are each independently tensioned by an anchoring, adjustable bolt and pivoting arm tightener system.

PRIOR TO 08 SERIAL NUMBERS-To tighten the main aprons, tighten down the anchoring eye bolts centrally located at each side of the forage box on the steel 10" stringers.

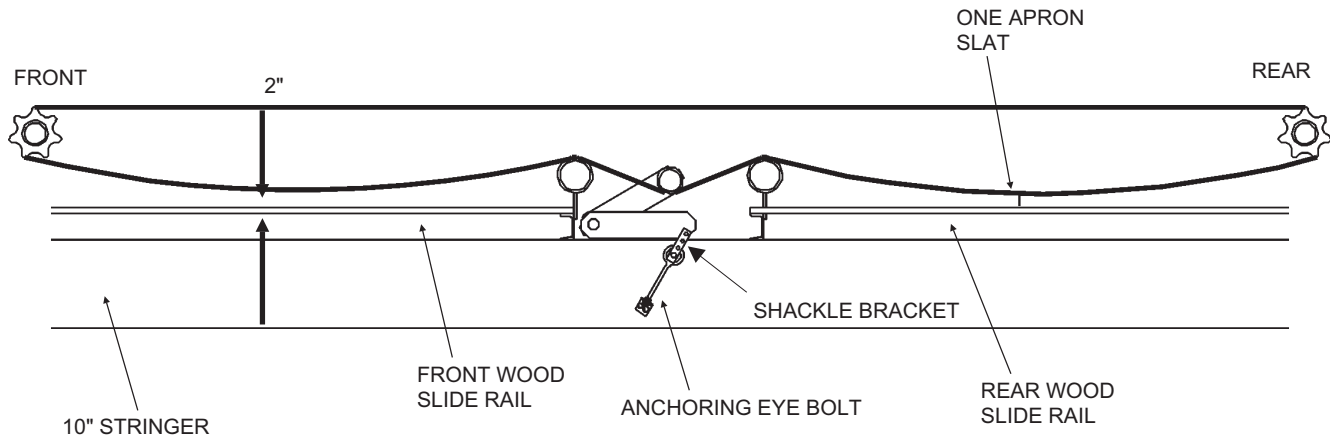
08 SERIAL NUMBERS AND LATER-To tighten the main aprons, tighten the tensioner rod on the spring loaded tensioner centrally located at each side of the forage box on the steel 10" stringers. Tighten the spring to a 5" compressed length.

In addition to tightening the anchoring eye bolts, there is located on the inner chain strands of each apron assembly a fine adjustment bolt on the pivoting arm tightener. Adjust as needed to equalize stretch in chain strand pairs of each independent apron assembly. See page 26.



ADJUSTMENT DIAGRAMS (Shields Removed for Illustration Purposes Only)

ADJUSTMENT of 3200-4200 SERIES MAIN APRON CHAINS PRIOR TO 08 SERIAL #'S



(Left Hand Side - Side View) - typical both sides

A. For Regular Tightening:

IMPORTANT AT ALL TIMES OF OPERATION!

Correct apron tension occurs when the return main apron slats ride 2" at mid span off of the front pair of wooden slide rails and only one apron slat touches at mid span on the rear pair of wooden slide rails.

For Additional Regular Tightening Adjustment:

Move the main apron tightening pivot arm, pivot bolt down the length of the shackle bracket closer to the anchoring bolt.

NOTE: After repeated regular tightening of the main apron chain assemblies and when the return main apron slats begin to "bottom-out" onto the top of the 10" channel iron of the steel frame stringers, remove equal number of links from each apron chain assembly. Reset anchoring eye bolts for correct main apron tension.

Loosen the anchoring eye bolt on the main apron chain prior to making the adjustments on the individual chain strands. This will allow easier adjustment of the adjuster bolt. Located on the inner chain strand of each main apron assembly, there is an adjustable, tightening pivot arm with a $\frac{1}{2}$ x 1-1/4" adjuster bolt. Turn this $\frac{1}{2}$ X 1-1/4" bolt by first loosening two set screws located on the adjustable pivot arm. Tighten or loosen the $\frac{1}{2}$ " adjuster bolt to make fine adjustment/tightening in the individual chain strands or to equalize stretch in the individual chain strand pairs of each independent main apron assembly. **Retighten the two set screws and retighten the anchoring eye bolt for correct apron tension.**

B. For Fine Tightening & to Equalize Stretch in Individual Chain Strand Pairs.

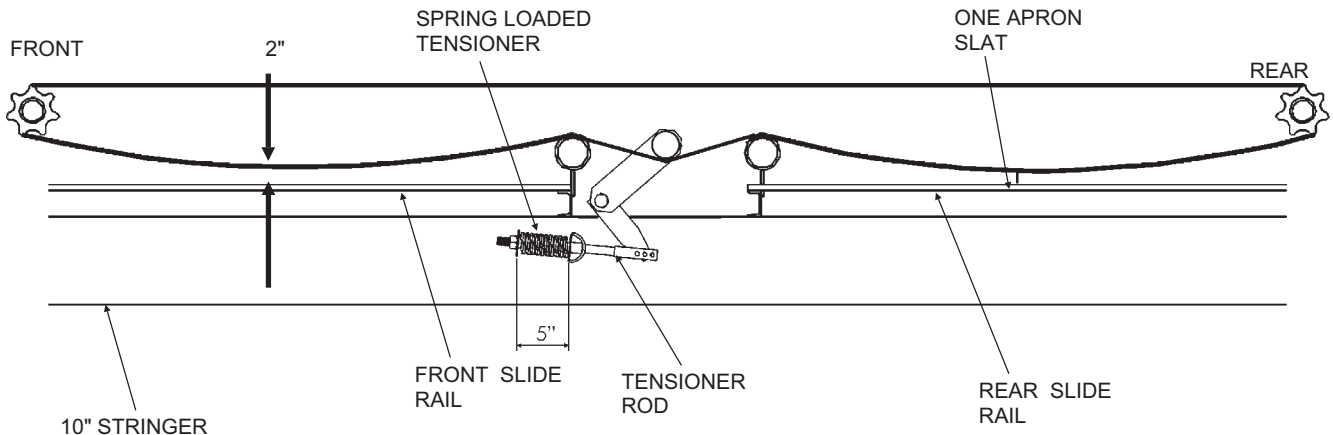
1. Allows to Fine Adjust/Tighten Individual Chain Strand Pairs of each Main Apron.
2. Allows to Equalize Stretch in Individual Chain Strand Pairs of each Main Apron.

IMPORTANT! WARRANTY MAY BE VOIDED

New Meyer Forage Box "Manufacturer's Warranty" shall not apply to any Meyer Forage Box, main apron chain, which has been subjected to misuse, negligence, alteration, accident or incorrect operation (adjustment) procedures.

Please! Follow Correct Main Apron Tightening and Adjustment Procedures!

ADJUSTMENT of 3200-4200 SERIES MAIN APRON CHAINS 08 SERIAL #'S & LATER



(Left Hand Side - Side View) - typical both sides

A. For Regular Tightening:

IMPORTANT AT ALL TIMES OF OPERATION!

Correct apron tension occurs when the return main apron slats ride 2" at mid span off of the front pair of slide rails and only one apron slat touches at mid span on the rear pair of slide rails.

For Additional Regular Tightening Adjustment:

There are 3 anchor holes on the clevis end of the tensioner rod. Relieve tension and anchor the clevis to a different hole when there is no more adjustment.

NOTE: After repeated regular tightening of the main apron chain assemblies and when the return main apron slats begin to "bottom-out" onto the top of the channel iron of the steel frame stringers, remove equal number of links from each apron chain assembly. Readjust the spring loaded tensioner for correct main apron tension.

B. For Fine Tightening & to Equalize Stretch in Individual Chain Strand Pairs.

1. Allows to Fine Adjust/Tighten Individual Chain Strand Pairs of each Main Apron.

2. Allows to Equalize Stretch in Individual Chain Strand Pairs of each Main Apron.

Loosen the spring loaded tensioner on the main apron chain prior to making the adjustments on the individual chain strands. This will allow easier adjustment of the adjuster bolt. Located on the inner chain strand of each main apron assembly, there is an adjustable, tightening pivot arm with a 1/2" x 1-1/4" adjuster bolt. Turn this 1/2" x 1-1/4" bolt by first loosening two set screws located on the adjustable pivot arm. Tighten or loosen the 1/2" adjuster bolt to make fine adjustment/tightening in the individual chain strands or to equalize stretch in the individual chain strand pairs of each independent main apron assembly. Retighten the two set screws and readjust the spring loaded tensioner for correct apron tension.

IMPORTANT! WARRANTY MAY BE VOIDED

New Meyer Forage Box "Manufacturer's Warranty" shall not apply to any Meyer Forage Box, main apron chain, which has been subjected to misuse, negligence, alteration, accident or incorrect operation (adjustment) procedures.

Please! Follow Correct Main Apron Tightening and Adjustment Procedures!

ROLLER CHAIN DRIVES

All roller chain drives are tensioned by automatic spring loaded tension blocks.

RANGE CONTROL CLUTCH ADJUSTMENT

With the Range control lever set to "NEUTRAL," the sliding splined jaw clutch should be at midspan between the "LO" and "HI" sprocket clutch jaws on the splined gear cluster shaft. Neither "LO" nor "HI" should be engaged. When the lever is moved to "LO", the engaging jaw clutch should mate with the "LO" range sprocket clutch and have about 1/16" of clearance. Likewise for the "HI" range when the lever is moved to "HI." This engagement is adjusted by changing the length of over-lap on the two, slotted hole linkage bars. See Lubrication Diagram, page 24 for location - A2.

NOTE: Pending sprocket tooth wear, the two clutch sprockets and the sliding splined jaw clutch can be switched from left to right and right to left on the splined gear cluster shaft to access new wear on opposite sides of jaw shoulders.

VARIABLE SPEED BELT REPLACEMENT

1. Shift the Variable Speed control lever to "NEUTRAL" (up).
2. Shift the Range control lever to "NEUTRAL" (center).
3. Move the Independent Outfeed Clutch control lever to "STOP" (up).
4. Lower the Fold Down Cross Conveyor Extension. If machine is equipped.
5. Open cluster shield plastic door.
6. Roll the old belt counter-clockwise off of the top sheaves starting at the 2:00 position.
7. Install the new belt around the lower sheaves and then roll clock-wise onto the top sheaves starting at the 10:00 position.
8. Close and securely fasten the cluster shield plastic door.
9. Raise and latch the Fold Down Cross Conveyor Extension. If machine is equipped.

VARIABLE SPEED CONTROL ADJUSTMENT

When the Variable Speed control lever is in "NEUTRAL," neither the main aprons nor the unloading augers are to operate **when under load** - (when wagon is full of forage). Variable speed operation should begin when the lever is moved down one or two notches from "NEUTRAL." To adjust the drive belt, follow these steps:

1. With the Variable Speed control lever in "NEUTRAL," remove the drive belt as described under Variable Speed Belt Replacement.
2. Move the Variable Speed control lever down to the 2nd from last notch on the control quadrant.
3. Check lower sheaves engagement:
 - A. If bases of sheaves do not set tight together: See step #4 (A)
 - B. If bases of sheaves bottom-out TOO tight together: See step #4 (B)
4. Loosen jam nut and remove bolt from the control rod special bolt and swivel eyelet assembly:
 - A. Lengthen or unthread the eyelet to set base of sheaves tight together.
 - B. Shorten or thread the eyelet to set base of sheaves tight together.
5. Reinstall bolt into control rod special bolt and swivel eyelet assembly, and tighten jam nut.
6. Check adjustment made by creating moderate tension on the Variable Speed control lever when moving lever between 2nd to last notch and last notch on the control quadrant.
7. Place Variable Speed control lever into "NEUTRAL," and reinstall the drive belt as described under Variable Speed Belt Replacement.

NOTE: The Variable Speed belt should be **REPLACED** when sheaves are correctly adjusted and the Variable Speed control lever does not engage the unloading augers until the 5th or 6th notch down on the control quadrant.

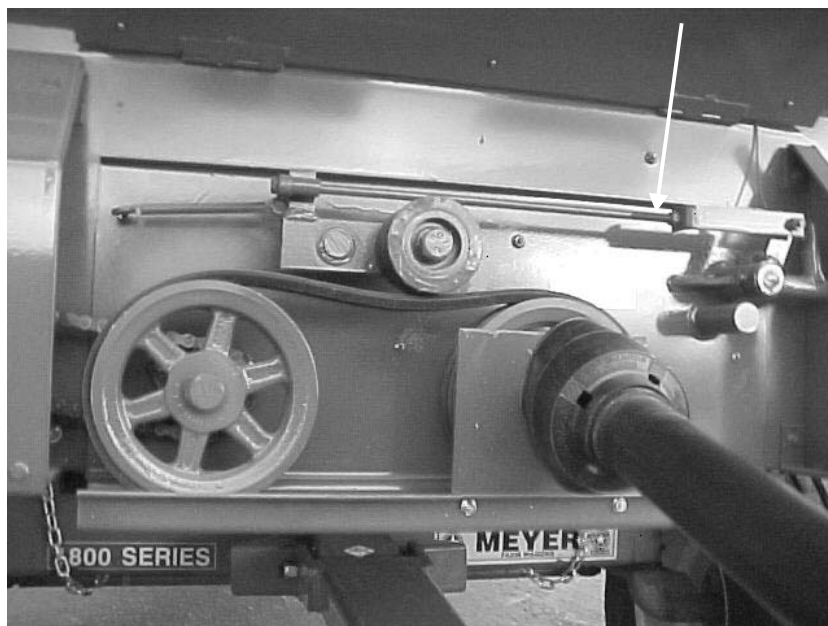
INDEPENDENT OUTFEED CLUTCH BELT REPLACEMENT

1. Move the Independent Outfeed Clutch control lever to "STOP" (up).
2. Extend the PTO drive shaft out straight and lower the tractor end down to ground level.
3. Unlatch and raise the hinged top, front chain shield assembly.
4. Remove the clutch bottom bracket - "belt pan."
5. Roll off the old Double V-Belt from the two pulleys.
6. Slide off the old belt down the length and over the end of the PTO drive shaft.
7. Install new Double V-Belt onto the two pulleys and check for proper engage, "RUN" tension. Adjust as needed.
8. Refasten the clutch bottom bracket - "belt pan and the PTO input shaft cover."
9. Lower and latch close the hinged top, front chain shield assembly.
10. Raise PTO drive shaft from ground level and return it to the PTO storage bracket.

INDEPENDENT OUTFEED CLUTCH ADJUSTMENT

Lengthen or shorten linkage bolt with jam nut to create moderate tension on the Double V-Belt when engaging the Independent Outfeed Clutch control lever into the "Run" position.

INDEPENDENT OUTFEED CLUTCH ADJUSTMENT

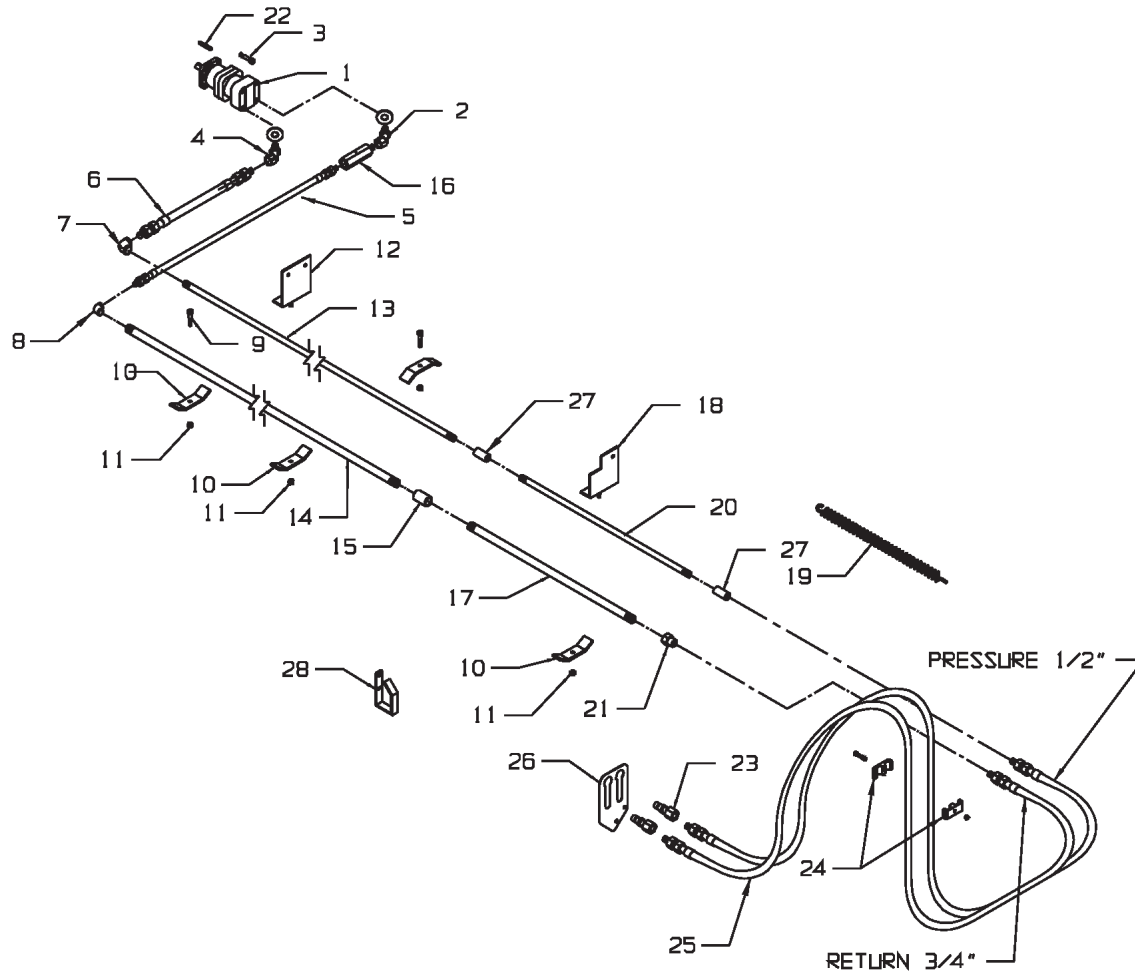


INDEPENDENT OUTFEED CLUTCH (Shield Removed for Illustration Purposes Only)

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REPAIR PARTS

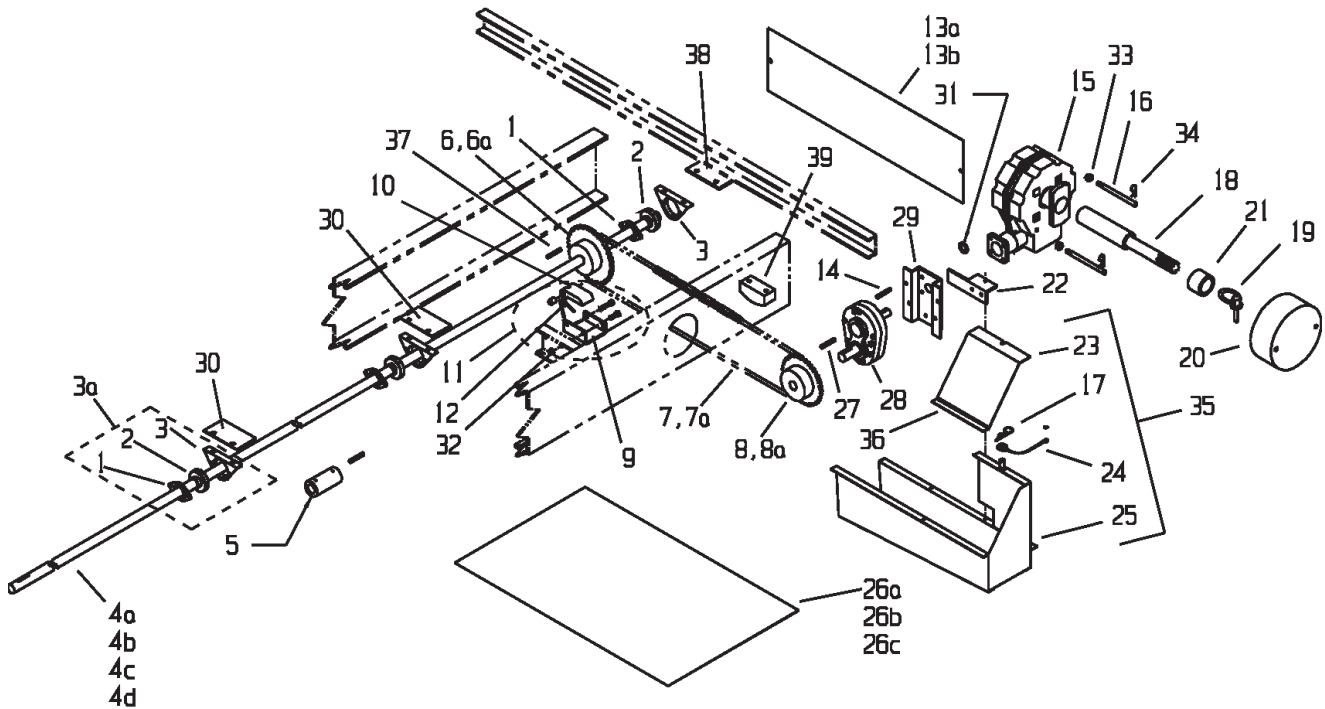
3200-4200 SERIES HYDRAULIC REAR UNLOAD COMPONENTS



KEY	PART NO.	QTY	DESCRIPTION
1	55-0099	1	Hydraulic Motor
2	55-0083	2	1/2" 45° NPSM Swivel
3	831-3816-1.25	4	3/8"-16x1-1/4" AHCS GR5
4	55-0059	1	1/2" x 45° NPSM Swivel
5	55-0029	1	3/4" Hose Assembly x 36" Long
6	55-0028	1	1/2" Hose Assembly x 36" Long
7	55-0010	1	1/2" 90° BM Elbow
8	55-0027	1	3/4" 90° BM Elbow
9	851-3816-1.5Z	2	3/8-16x1-1/2" GR 5 MB
10	25-0210-4	AR	Hyd Pipe Holder Clamp
11	815-3816-Z	4	3/8-16 Nylon Insert Lock Nut
12	25-0210-5	2	Box Hyd Pipe Holder
13	55-0025	1	16' Floor 1/2x183" Hyd. Pipe
	55-0023	1	18' Floor 1/2x207" Hyd. Pipe
	55-0021	1	20' Floor 1/2x231" Hyd. Pipe
	55-0074	1	22' Floor 1/2 x 24" Ext. Pipe
14	55-0024	1	16' Floor 3/4x185" Hyd. Pipe

KEY	PART NO.	QTY	DESCRIPTION
	55-0022	1	18' Floor 3/4x209" Hyd. Pipe
	55-0020	1	20' Floor 3/4x233" Hyd. Pipe
	55-0073	1	22' Floor 3/4 x 24" Ext. Pipe
15	55-0030	1	3/4" BM Coupler
16	55-0007-B-RF	1	3/4" Check Valve (Reverse Flow)
17	55-0037	1	3/4x30" Ext. Hyd. Pipe
18	25-0210-2	1	Unit Hyd Pipe Holder
19	29-0012	1	Spring
20	55-0038	1	1/2x30" Ext. Hyd. Pipe
21	55-0039	1	1/2" F x 3/4" F Reducer
22	35-0019-H	1	1/4"x1/4"x1-1/4" key with Rounded Ends (Hard)
23	55-0013	2	Pioneer Coupler
24	55-0033	1	Clamp Assembly
25	55-0034	2	1/2" 2-wire x120" M Hose Assy
26	25-0249-1	1	Holder for Hyd. Hose Ends
27	55-0006	2	1/2" BM Coupling
28	25-0209	1	Hyd. Hose Holder Bracket

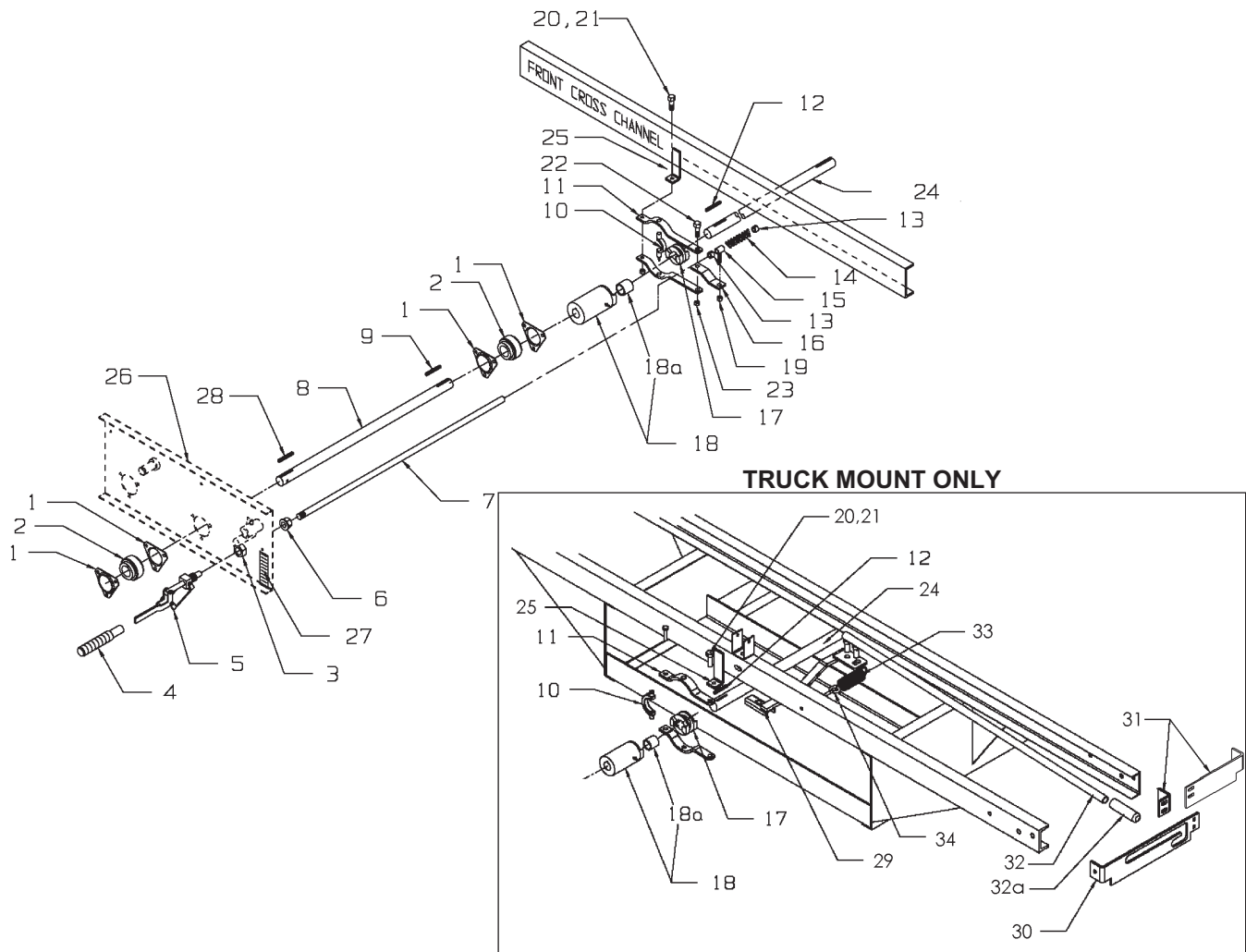
PTO REAR UNLOAD DRIVE TRAIN



KEY	PART NO.	QTY	DESCRIPTION
1	14-0003-2	AR	Flange, 2 Hole, 1 1/4"
2	14-0002-3	AR	Bearing, 1 1/4" w/collar
3	14-0003-1	AR	Pillow Block Flanges, 2 Hole, 1 1/4"
3A	14-0032	AR	1 1/4" Cast Pillow Block Bearing
4a	23-0083	1	16' Box, 194 1/2" Drive Shaft
4b	23-0084	1	18' Box, 218 1/2" Drive Shaft
4c	23-0086	1	20' Box, 240" Drive Shaft
4d	23-0039	1	22' Box 48" Drive Shaft Ext.
5	37-0007	1	Shaft Coupler (22' Box Only)
6	10-0002	1	50B28 1 1/4" B, 1/4" K WY
6a	10-0083	AR	60B24 1 1/4" B, K WY (22' Box Only)
7	11-0086	1	#50-180 Roller Chain
7a	11-0118-HD	AR	#60-148 Hvy. Duty Roller Chain (22' Box Only)
8	10-0035	1	50B19 1 1/4" B, 1/4" K WY
8a	10-0082	AR	60B16 1 1/4" B, 1/4 K WY (22' Box Only)
9	25-0011-1	1	Chain Tightener Bracket
10	41-0001	1	Tightener, 5" Nylon Paddle
11	41-0029	1	Tightener Assembly w/Bracket
12	29-0002	2	Torsion Spring
13a	52-0018-12	1	3200 Series Rear Stringer Cover Shield
13b	52-0018-3	1	4200 Series Rear Stringer Cover Shield
14	35-0021-H	1	1/4" x 1/4" x 1 3/4" Key (Hard)
15	19-0025	1	Rear Gear Box (25:1 Ratio)
16	24-0115-3	2	Shield Mounting Stud Bolt
17	32-0021	1	2" Hair Spring Cotter Pin
18	23-0059-2	1	Rear Splined Drive Shaft
19	823-0002	1	Lynch Pin
20	24-0115-4	1	Rear Gear Box Round Shield

KEY	PART NO.	QTY	DESCRIPTION
21	43-0020	1	Idler Sleeve Spacer
22	52-0018-11	1	Gear Box Bracket, Mounting Gusset
23	52-0018-2-8	1	Top Cover Shield Door w/Hinge Assembly
24	32-0022	1	6" Lanyard
25	52-0018-2-9	1	Cover Shield Weldment w/o Door Assembly
26a	52-0018-13	1	Model 3214/3216 Roller Chain Return Pan
26b	52-0018-9	1	Model 3218/3220 Roller Chain Return Pan
26c	52-0018-7	1	4200 Series Roller Chain Return Pan
27	35-0001	1	1/4" x 1/4" x 1 1/8" Key
28	19-0032	1	1:1 Ratio Gear Box Assembly
29	52-0028-1	1	1:1 Gear Box Mounting Bracket
30	25-0171	AR	Carrier Bearing Plate
31	808-1-1.5-1 8	1	18 GA x 1" ID x 1 1/2" OD M.B.
32	52-0018-8	1	Chain Tightener Mount Channel
33	813-5013-Z	1	1/2" -13 Regular Nut
34	32-0019	2	#10 Hair Spring Cotter Pin
35	52-0018-2	1	Rear Shielding Assembly w/Door
36	52-0018-2-6	1	9" Long Hinge Only
37	35-0021	1	1/4" x 1/4" x 1 3/4" Key
38	25-0287-1	1	Carrier Bearing Plate (20' - 22')
	25-0171	1	Carrier Plate (16' - 18')
39	901-3618-6	1	Wood Tightening Block

PTO REAR UNLOAD DRIVE CLUTCH

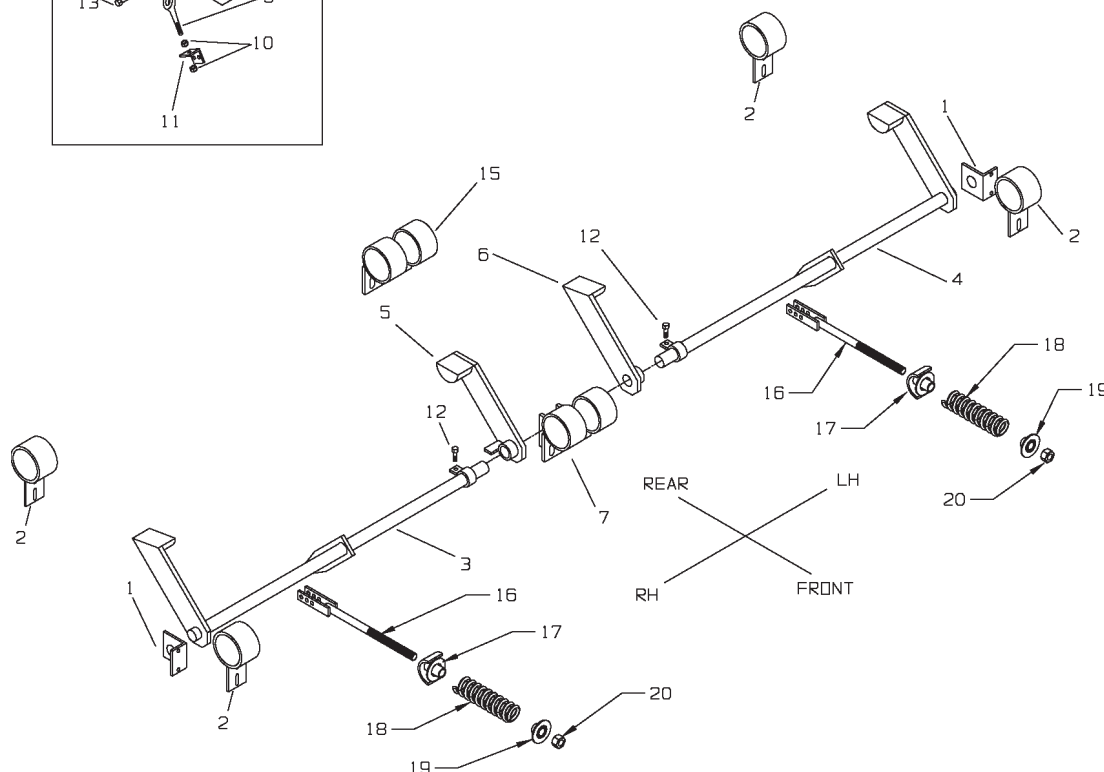
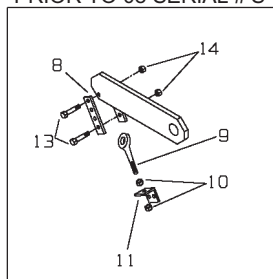


KEY	PART NO.	DESCRIPTION
1	14-0002-2	Flange, 3-hole, 1-1/4"
2	14-0002-3	Bearing, 1-1/4" w/collar
3	826-1014	1-14 Jam Nut (Only)
4	16-0040-3	Red Handle Grip
5	16-0040-1	Shifter Control, Hand Toggle Lever
6	810-3816-Z	3/8-16 Flange Spin Lock Nut
7	16-0043-1	Rear Clutch Linkage Rod
8	23-0082	Unit Center Shaft
9	35-0016	1/4x1/4x2-1/4" Key
10	21-0001	Brass Shifter Collar w/zerk
11	17-0001	Clutch Shifter Yoke
12	35-0023	1/4x2" Key w/rounded Ends
13	14-0036	3/8 Shaft Lock Collar
14	29-0014	Spring
15	16-0041	Linkage Pivot Sleeve
16	25-0278-1	Shifting Bracket Extension
17	15-0003	Jaw Clutch 1-1/4" Bore w/1/4" Keyway
18	15-0005	PTO Rear Clutch Coupler
18a	13-0014	Bronze Bushing 1-1/4IDx1-1/2ODx1-1/2" Long
19	814-3816-Z	3/8-16 Indented Lock Nut
20	851-3816-1.5Z	3/8-16x1-1/2" Gr. 5 Machine Bolt

KEY	PART NO.	DESCRIPTION
21	815-3816-Z	3/8-16 Nylon Insert Locknut
22	851-5013-1.5Z	1/2-13 x 1 1/2 GR5 MB ZN
23	815-5013-Z	1/2-13 Nylon Insert Lock Nut
24	23-0083	16' Box, 194 1/2" Drive Shaft
	23-0084	18' Box, 218 1/2" Drive Shaft
	23-0086	20' Box, 240" Drive Shaft
	23-0039	22' Box Ext Shaft (Uses #23-0084 Plus Ext)
25	100-7000-40	Yoke Pivot Bracket
26	25-0267	Clutch Plate Wldmnt w/ Jam Nut
27	46-0001-68	Rear Unload Engage/Disengage Decal
28	35-0021	1/4 x 1/4 x 1 3/4 Key
29	25-0134	Linkage Arm Welded Assy.
30	25-0135-1	Side Shift Plate
31	25-0135-3	Side Shift Plate
	25-0135-2	Side Shift Plate
32	25-0136	Pipe Handle w/grip
32a	51-0004	Rubber Grip Only
33	929-0003	Spring
34	933-3804	5/16-18x4" Eyebolt

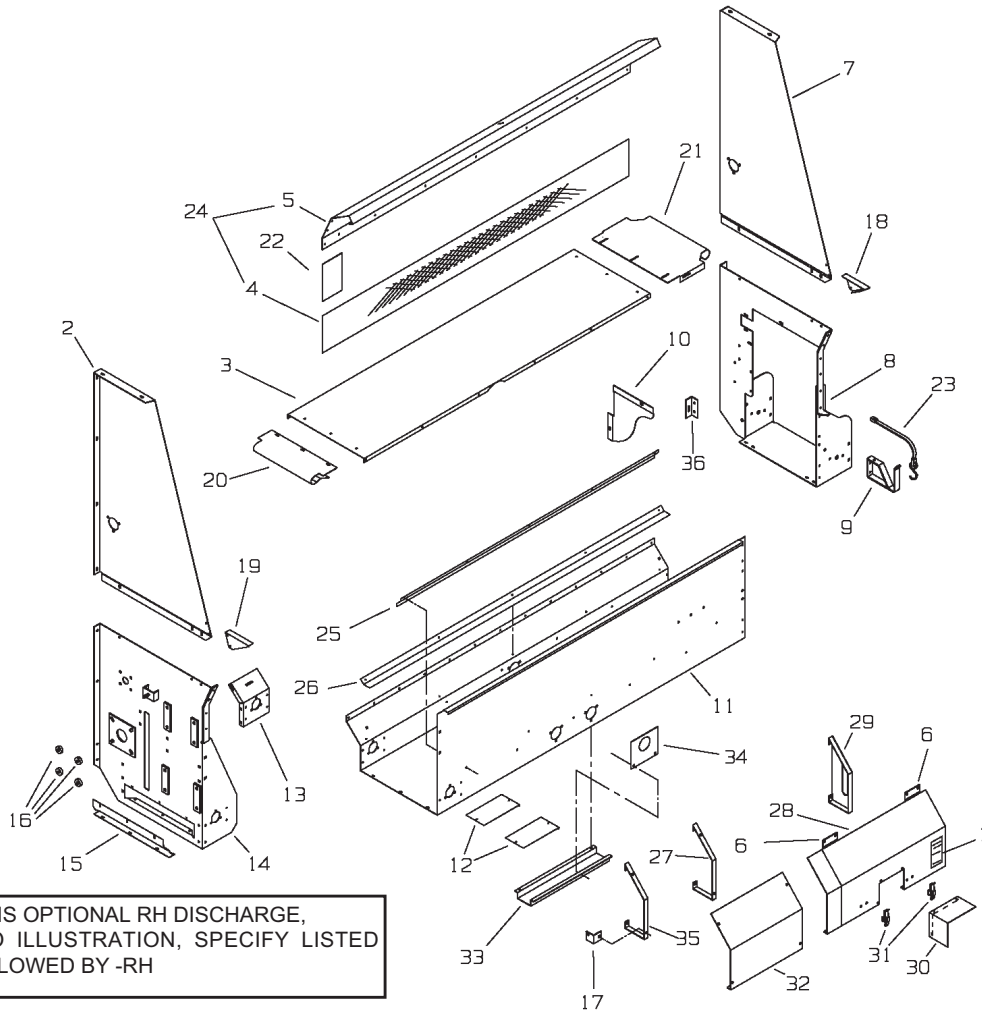
FRONT & REAR UNLOAD FORAGE BOX MAIN APRON CHAIN TIGHTENER

PRIOR TO 08 SERIAL #'S



KEY	PART NO.	QTY	DESCRIPTION
1	25-0215	2	Tightener Assy Mount Angle
2	25-0211	4	Outside Chain Lift Pipe Welded Assembly
3	25-0222	1	RH Tightener Assembly (Prior to 08 Serial #'s)
	25-0247	1	RH Tightener Assembly (08 Serial #'s & Later)
	25-0222-TRUCK	1	Truck Mt RH Tightener Assembly (Prior to 08 Serial #'s)
	25-0247-TRUCK	1	Truck Mt RH Tightener Assembly (08 Serial #'s & Later)
4	25-0223	1	LH Tightener Assembly (Prior to 08 Serial #'s)
	25-0248	1	LH Tightener Assembly (08 Serial #'s & Later)
	25-0223-TRUCK	1	Truck Mt LH Tightener Assembly (Prior to 08 Serial #'s)
	25-0248-TRUCK	1	Truck Mt LH Tightener Assembly (08 Serial #'s & Later)
5	25-0224	1	Adjustable Tightener Arm, RH
6	25-0225	1	Adjustable Tightener Arm, LH
7	25-0216	1	Center Bracket, Apron Tightener Mount
8	25-0220	4	Apron Tightener Shackle (Prior to 08 Serial #'s)
9	811-5013-4Z	2	1/2-13x4" Eyebolt (Prior to 08 Serial #'s)
10	813-5013-Z	4	1/2"-13 Regular Nut (Prior to 08 Serial #'s)
11	25-0221	2	Apron Tightener Angle Clip (Prior to 08 Serial #'s)
12	851-5013-1.25Z	2	1/2-13x1-1/4" GR5 Bolt (Fine Adjustment Bolt)
13	851-3816-1.5Z	4	3/8-16x1-1/2" Bolt GR 5
14	815-3816-Z	4	3/8"-16 Nylon Insert Lock Nut
15	25-0219	1	Apron, Center Pipe Bracket
16	25-6007	2	Tightener Rod Assy. Main Apron (08 Serial #'s & Later)
17	25-6011	2	Rocking Sleeve Assy. Tightener Bolt (08 Serial #'s & Later)
18	929-0002	2	Main Apron Tightener Spring (08 Serial #'s & Later)
19	925-3841	2	Outer Spring Guide, Tightener Assy. (08 Serial #'s & Later)
20	815-7510-Z	2	3/4-10 Nut (08 Serial #'s & Later)

TSS UNIT FRAME W/ IOC

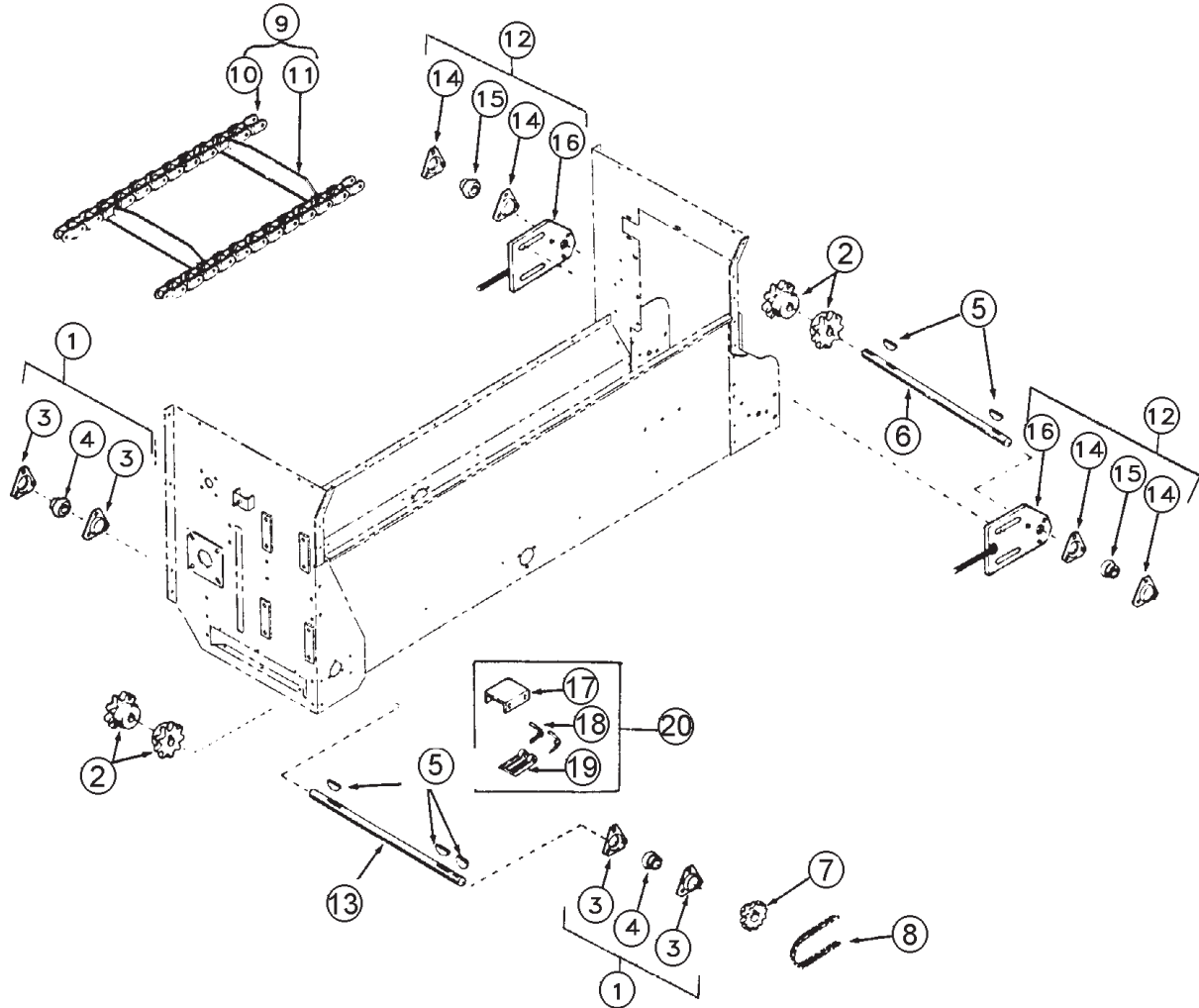


IF YOUR UNIT IS OPTIONAL RH DISCHARGE,
OPPOSITE TO ILLUSTRATION, SPECIFY LISTED
PART NO. FOLLOWED BY -RH

KEY	PART NO.	QTY	DESCRIPTION
1	46-0001-66	1	Stop - Run Decal
2	25-0148-2	1	RH Top Auger Extension
3	27-0027	1	Top Apron Pan
4	31-0006-2	1	Expanded Metal Screen
5	31-0006-1	1	Upper Spillage Guard
6	24-0123-2	2	Hinge Only, 4" Long- Heavy Duty
7	25-0148-1	1	LH Top Auger Extension
8	39-0017	1	Discharge Frame
9	25-0006	1	PTO Hanger Bracket
10	24-0099	1	Auger Guard
11	27-0028	1	Apron Pan (Prior to serial #06T2230)
	27-0031	1	Apron Pan (Serial #06T2230 & Later)
	27-0028-RH	1	R.H. Apron Pan (Prior to serial #06T2230)
	27-0031-RH	1	R.H. Apron Pan (Serial #06T2230 & Later)
12	24-0103	2	Access Cover
13	39-0019	1	Pan Support Bracket (Prior to serial #06T2230)
	39-0024	1	Pan Support Bracket (Serial #06T2230 & Later)
	39-0019-RH	1	R.H. Pan Support Bracket (Prior to serial #06T2230)
	39-0024-RH	1	R.H. Pan Support Bracket (Serial #06T2230 & Later)
14	39-0021	1	RH Side Plate Weldment
15	27-0026	1	TSS Clean-Out Panel

KEY	PART NO.	QTY	DESCRIPTION
16	43-0014	4	Gearbox Spacer (weld to end Frame)
17	24-0010-2	1	Front Shield Angle Clip
18	34-0007	1	LH Spillage Guard Gusset
19	34-0008	1	RH Spillage Guard Gusset
20	24-0079	1	Right Conveyor Shaft Shield
21	24-0059	1	Left Conveyor Shaft Shield
22	31-0006-3	1	Spillage Screen Block
23	33-0032	1	Hold Down Strap
24	31-0006	1	Spillage Guard w/screen & block
25	25-0200	1	TSS X-Apron Front Holddown
26	25-0201	1	TSS X-Apron Rear Holddown (Prior to serial #06T2230)
	25-0203	1	TSS X-Apron Rear Holddown (Serial #06T2230 & Later)
27	25-0265-1	1	Center, Front Shield Bracket
28	24-0123	1	Hinged Front Chain Shield Asm
29	24-0122	1	Clutch Front Shield End Cap
30	31-0005	1	PTO Guard (LH)
31	32-0001-1	1	Door Catch, Latch
32	24-0124	1	RF Stationary Chain Shield
33	25-0261	1	Clutch Bottom Bracket, Belt Pan
34	24-0125-1	1	Clutch, PTO Shaft Cover
35	25-0266-1	1	RH, Front Shield Bracket
36	39-0015-1	1	Left End Frame Tab (Serial #06T2230 & Later)

TSS CROSS CONVEYOR W/IOC

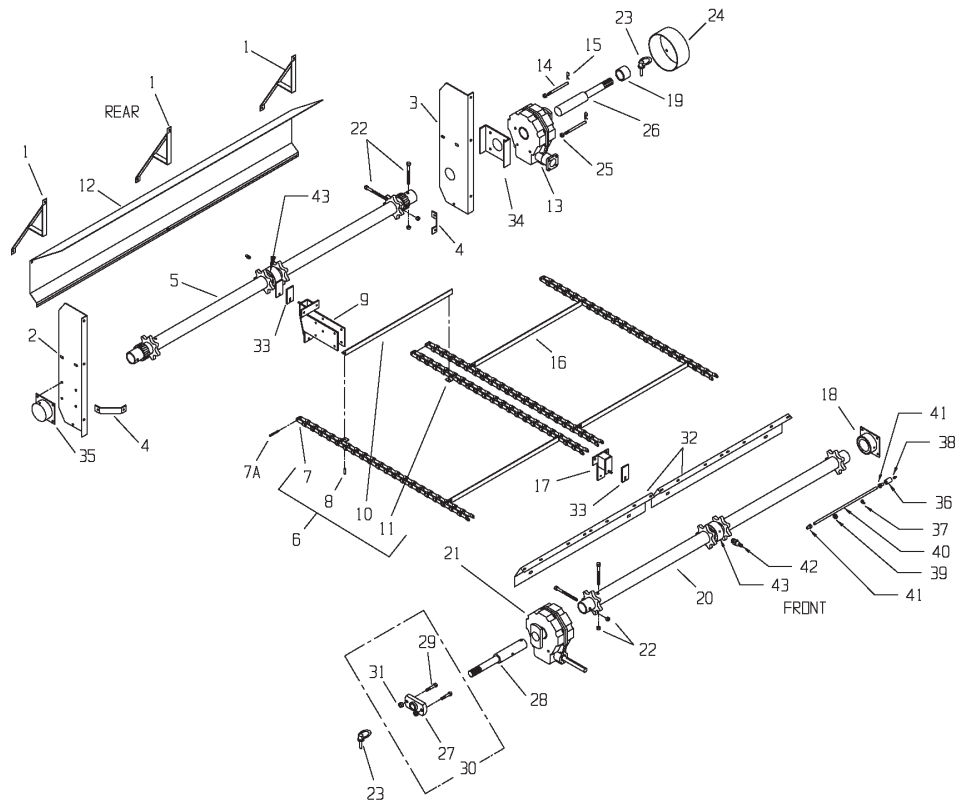


KEY	PART NO.	QTY	DESCRIPTION
1	14-0004	2	Bearing Assembly, 1"
2	10-0008	4	Sprocket, No.55-8 Tooth
3	14-0004-2	8	Flange, 3 Hole, 1"
4	14-0004-3	4	Bearing, 1" w/collar
5	35-0002	5	Key, Woodruff, 1/4"x1-1/4"
6	23-0023	1	Shaft, Cross Conveyor (Left)
7	10-0007	1	Sprocket, 50B28, 1" Bore
8	11-0111	1	Roller Chain - #50 (144 links) (Prior to serial #09T2201)
	11-0140	1	Roller Chain - #50 (142 links) (Serial #09T2201 & Later)
9	11-0060	1	Regular Pintle Chain Assy
	11-0059	1	Ext. Pintle Chain Assy Complete
10	11-0006-1	206	Link, Pintle Chain (w/2 pins & cotter pins)

KEY	PART NO.	QTY	DESCRIPTION
11	11-0006-2	16	Chain Slat w/attachments
12	14-0022	2	Tightener Bearing Asm.
13	23-0008	11	Cross Conveyor Shaft (Right)
14	14-0004-2	4	Flange, 3 Hole, 1"
15	14-0004-3	2	Bearing, 1" w/collar
16	25-0074	2	Bracket, Tightener Bearing
17	25-0011	1	Bracket, Chain Tightener
18	29-0002	2	Spring, Chain Tightener
19	41-0001	1	Tightener 5", Nylon Slide
20	41-0024	1	Tightener Asm.

IF YOUR UNIT IS OPTIONAL RH DISCHARGE, OPPOSITE TO ILLUSTRATION, SPECIFY LISTED PART NO. FOLLOWED BY -RH

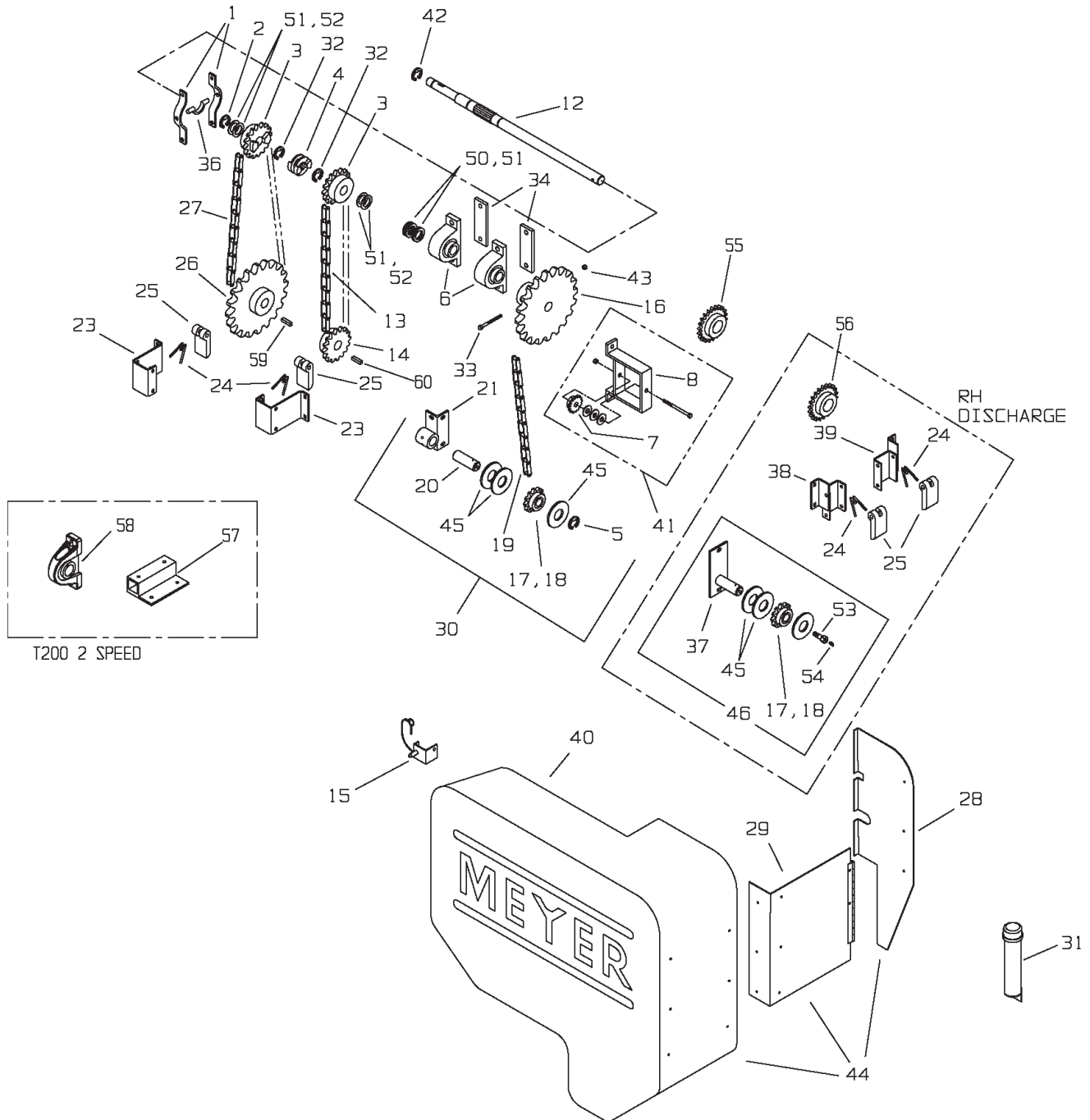
FRONT & REAR UNLOAD MAIN APRON



KEY	PART NO.	QTY	DESCRIPTION
1	25-0237	3	Rear Apron Shield Brace
2	25-0218-1	1	Right Main Roller Bracket
3	25-0190-1	1	Left Main Roller Bracket
4	25-0179	2	Bearing Bracket Brace
5	23-0059	1	Rear Drive Main Roller
6	11-0101	2	Chain Assy 3216 Floor, 667H
	11-0102	2	Chain Assy 3218 Floor, 667H
	11-0103	2	Chain Assy 3220 Floor, 667H
	11-0104	2	Chain Assy 4216 Floor, 667X
	11-0105	2	Chain Assy 4218 Floor, 667X
	11-0106	2	Chain Assy 4220 Floor, 667X
	11-0119	2	Chain Assy 4222 Floor, 667X
7	11-0068-3		Pintle Chain Link-D667H
	11-0008-1		Pintle Chain Link-D667X
7A	11-0068-4		Pintle Chain Pin 667H
	11-0008-8		Pintle Chain Pin 667X
8	11-0008-2		Rivet, 3/8x1
9	25-0205	1	Rear Center Bearing Support Brk.
10	11-0080		Main Apron Slat Only
11	11-0068-2		Attachment Link-D667H
	11-0008-3		Attachment Link-D667X
12	24-0129	1	Rear Shield Complete
13	19-0025	1	Rear Gear Reducer (25:1)
14	24-0115-3	2	Shield Mounting Stud
15	32-0019	2	Hair Spring Cotter Pin
16	11-0081-2		Chain Slat w/attach-ments-667H
	11-0084-2		Chain Slat w/attach-ments-667X
17	25-0018	1	Front Ctr. Brg. Support Bracket
	25-0204	1	20' Front Ctr. Brg. Support Bracket
18	14-0009-T	1	Main Roller Shaft Bearing Assy.
19	43-0020	1	Idler Sleeve Spacer

KEY	PART NO.	QTY	DESCRIPTION
20	23-0069	1	Front Drive Main Roller
21	19-0024	1	Front Gear Reducer (50:1)
22	33-0017	2	Bolt, 5/8 x 3-1/2" Gr. 5 W/Locknut
23	823-0002	2	Lynch Pin
24	24-0115-4	1	Rear Gearbox Shield
25	813-5013-Z	2	1/2"-13 Regular Nut
26	23-0059-2	1	Rear Splined Drive Shaft Hardened
27	37-0010-4	1	Coupler Plate Only
28	23-0060-1	1	Front Splined Drive Shaft Hardened
29	831-7516-2	2	Drive Bolt, 3/4-16x2 Allen Head Gr. 8
30	37-0010	1	Coupler Plate Assembly Complete
31	884-7516-Z	2	3/4-16 Flange Top Locknut
32	27-0030	2	Reverse Chain Guide Panel (Prior to serial #06T2230)
	27-0032	2	Reverse Chain Guide Panel (Serial #06T2230 & Later)
33	Shim	AR	Center Bearing Bracket Shim
34	25-0206	1	Gearbox Mounting Bracket
35	14-0034	1	Rear Main Roller Shaft Brg. Assy.
36	30-0009	1	1/8" NPT Coupler
37	32-0024	1	9/32" Loom Clamp
38	30-0002	1	1/8" NPT Straight Zerk
39	33-1003	1	Rubber Grommet
40	735-.25CT		Copper Tube Grease Line (order by foot)
41	930-3602	2	Male Brass Compression Fitting
42	30-0018	1	1/8 x 1/8 45° St. Elbow
43	14-0035	2	Split Ctr Brg (Replacement)

TWO SPEED CLUSTER DRIVE



SPECIFY-RH FOR RH DISCHARGE.

ITEMS 15, 28, 29, 40 ARE PARTS OF COMPLETE ASSEMBLY, KEY 44.

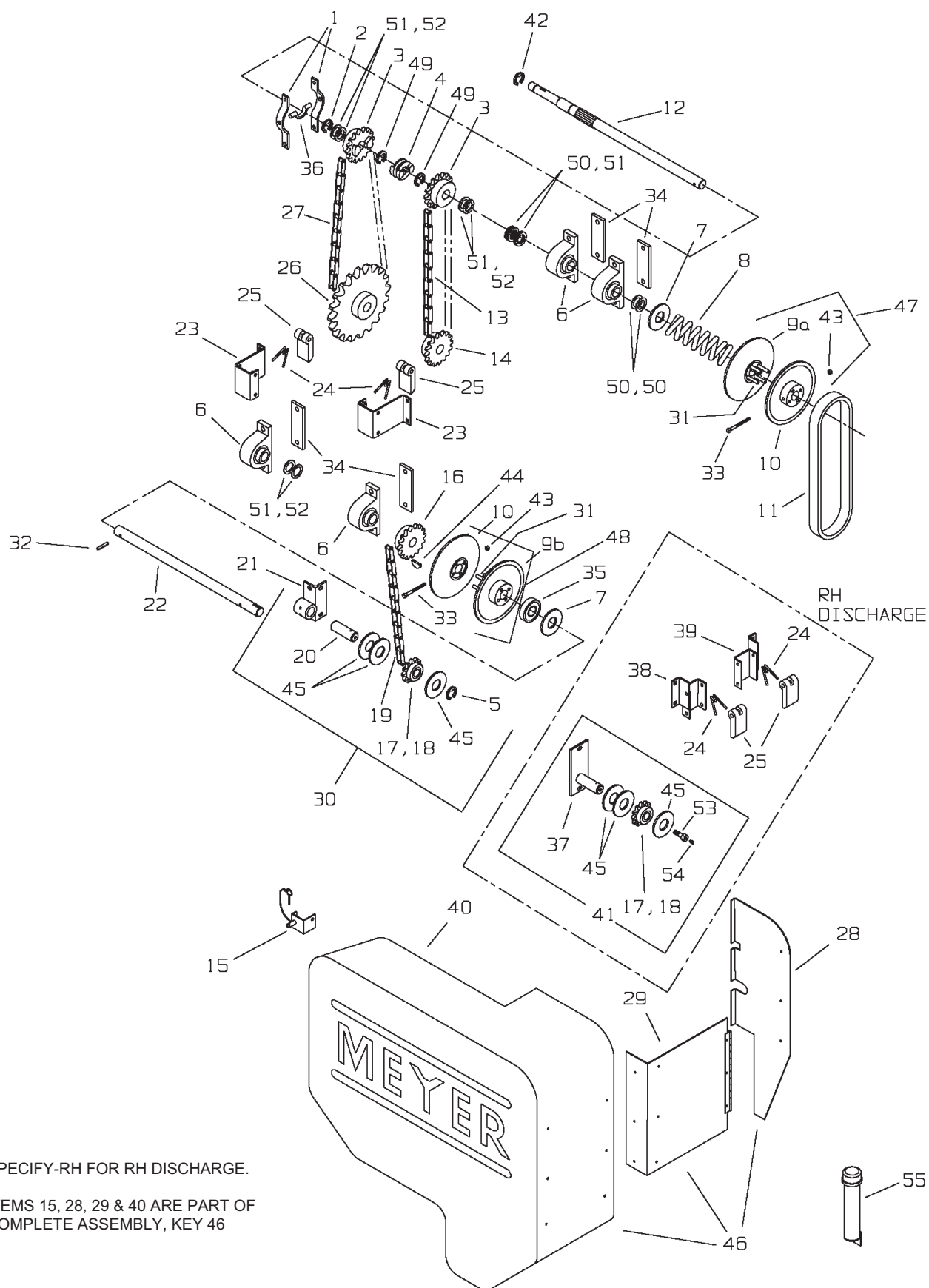
TWO SPEED CLUSTER DRIVE

KEY	PART NO.	QTY.	DESCRIPTION
1	17-0001	2	Clutch Shifter Yoke
2	33-0012	1	1-1/4 Dia Retaining Ring
3	10-0006	2	Clutch Sprkt 50C16 1-1/4 Bore
4	15-0001	1	Jaw Clutch 1-1/4 Splined Bore
5	33-1000	1	1-1/8" Retaining Ring
6	14-0032	4	1-1/4 Pillow Block Brg
	14-0002-3G	4	1-1/4 Bearing Only (greaseable)
7	10-0068	1	Idler Sprkt 50C17 w/Bearing
	10-0068-1	1	1/2" Idler Bearing Only
8	25-0165	1	Idler Sprkt Mounting Brkt
12	19-0015-1-2SP	1	Upper Gearbox Input Shft, Drilled
13	11-0088	1	#50-69 Roller Chain (Prior to serial #09T2201)
	11-0009	1	#50-72 Roller Chain (Serial #09T2201 & Later)
14	10-0064	1	Sprkt 50B19 1"B (Prior to serial #09T2201)
	10-0042	1	Sprkt 50B24 1"B (Serial #09T2201 & Later)
15	25-0197	1	Door Catch Assembly
16	10-0070	1	Sprkt 50B32 1-1/4" Bore, Drilled (Prior to serial #09T2201)
	10-0072	1	Sprkt 50C28 1-1/4" Bore, Drilled (Serial #09T2201 & Later)
17	14-0026	1	1-1/8" B Needle Bearing Only
18	10-0061	1	Idler Sprkt 50C17 w/Needle Brg
19	11-0100	1	#50-195 Roller Chain
20	23-0044	1	Idler Shaft
21	25-0164	1	Idler Bracket Weldment
23	25-0161-1	2	Chain Tensioner Bracket
24	29-0002	4	Tensioner Spring
25	41-0001	2	Tightener, 5" Nylon Slide
26	10-0060	1	Sprkt 50B42 1" Bore
27	11-0089	1	#50-82 Roller Chain
28	25-0198	1	Shield Mount Plate
29	24-0112-4	1	Shield Support with Hinge
30	44-0048	1	2-Spd Frt Idler Shaft Asm.
31	33-0044	1	Manual Holder w/Cap

KEY	PART NO.	QTY.	DESCRIPTION
32	33-0018	2	1-1/4" Snap Ring
33	851-3118-3.5Z	2	5/16x3-1/2 MB GR5
34	43-0013	4	Spacer Plate
36	21-0001	1	Collar, Clutch Shifter-Brass
37*	25-0189	1	2-Spd Idler Brkt Plate & Shaft Wldmt
38*	25-0183-RHH	1	Tightener Bracket Wldmt (High)
39*	25-0183-RHL	1	Tightener Bracket Wldmt (Low)
40	24-0112-1	1	Plastic Door Only
41	44-0049	1	2 Spd Idler Brkt Asm w/Sprkt
42	19-0055-4-19	1	1" ID Snap Ring
43	815-3118-Z	2	5/16" Nylon Insert Lock Nut
44	24-0112-K	1	Shield Asm - LH Unload
	24-0110-RH	1	T200 RH Cluster Shield
	24-0098	1	RH Cluster Door
45	808-1.13-1.75-1	A/R	18 Ga. 1-1/8 ID Machine Bushing
46*	44-0050	1	RH 2 Spd Idler Plate Asm w/Sprkt
50	808-1.25-1.875-10	A/R	10 Ga. 1-1/4 ID. Machine Bushing
51	808-1.25-1.875-14	A/R	14 Ga. 1-1/4 ID Machine Bushing
52	808-1.25-1.875-18	A/R	18 Ga. 1-1/4 ID Machine Bushing
53	33-0030-RH	1	Idler Shaft Grease Bolt, 1/2" x 3/4"
54	30-0004	1	1/4"-28 90° Grease Fitting
55	10-0019	1	Sprkt 50B22 1" Bore
56*	10-0004	1	Lower Shaft Sprocket, 50B17, 1-1/4" B, 1/4 Keyway
57	25-0166	1	2 Speed Bearing Support
58	14-0039	1	1" Pillow Block Bearing
59	35-0001	1	1/4 x 1/4 x 1-1/8" Key
60	35-0021	1	1/4 x 1/4 x 1-3/4" Key

* These items for RH discharge units only

TSS VARIABLE SPEED CLUSTER DRIVE W/IOC



SPECIFY-RH FOR RH DISCHARGE.

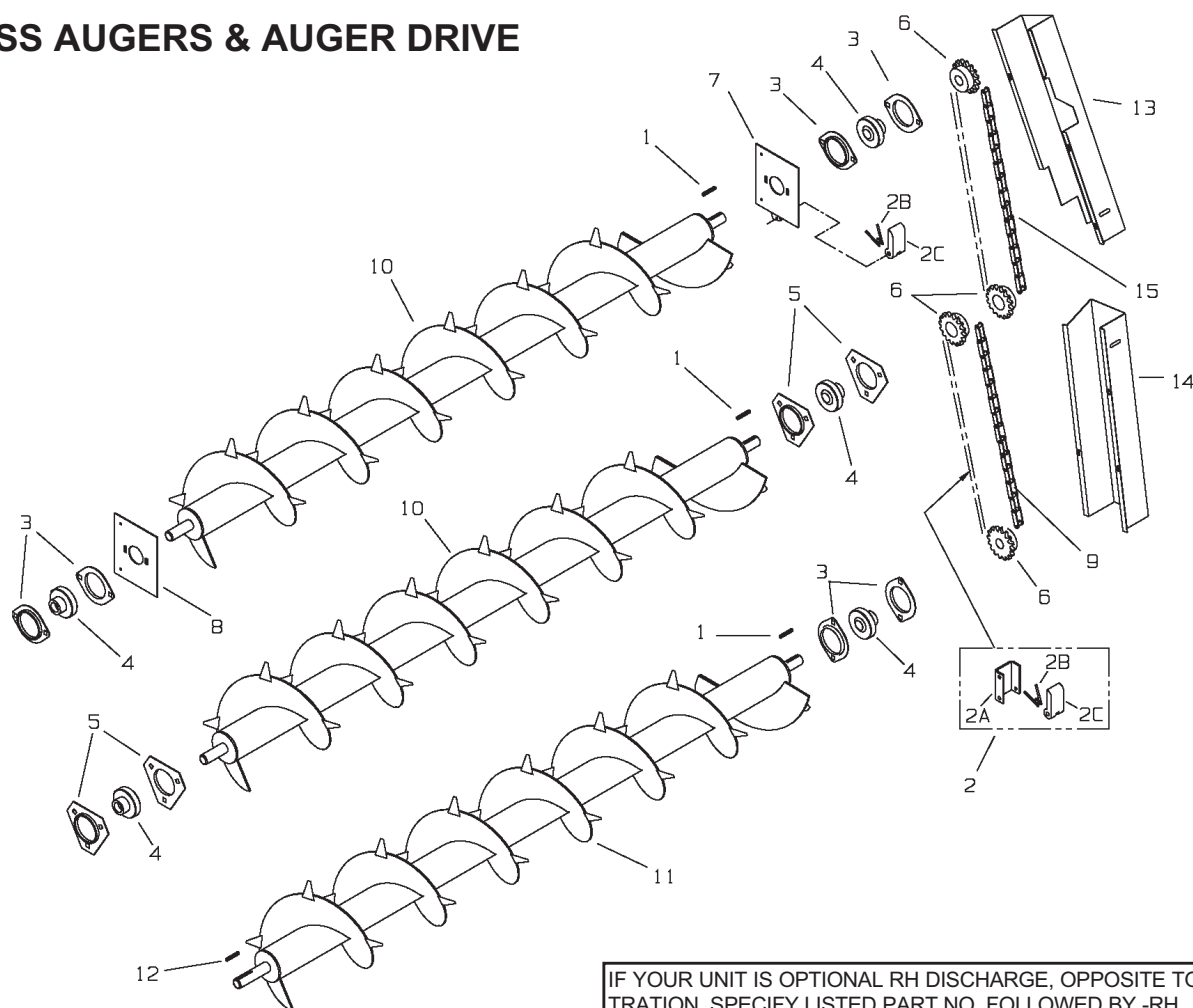
ITEMS 15, 28, 29 & 40 ARE PART OF
COMPLETE ASSEMBLY, KEY 46

TSS VARIABLE SPEED CLUSTER DRIVE W/IOC

KEY	PART NO.	QTY	DESCRIPTION
1	17-0001	2	Clutch Shifter Yoke
2	33-0012	1	1-1/4 Dia Retaining Ring
3	10-0006	2	Clutch Sprkt 50C16 1-1/4 Bore
4	15-0001	1	Jaw Clutch 1-1/4 Splined Bore
5	33-1000	1	1-1/8" Retaining Ring
6	14-0032	4	1-1/4 Pillow Block Brg
	14-0002-3G		1-1/4 Bearing Only (greaseable)
7	828-0125Z	1	SAE Washer 1-1/4 ID
8	29-0009	1	Spring, Clutch
9a	12-0015-HD	1	Variable Sheave Half, Tapped (Upper Sheave Shaft)
9b	12-0009-HD	1	Variable Sheave Half, Tapped (Lower Sheave Shaft)
	12-0009-1	1	Rubber O-Ring Only (not illustrated)
10	12-0010-HD	2	Fixed Sheave Half
11	49-0013	1	Belt
12	19-0015-1	1	Upper Gearbox Input Shaft
13	11-0088	1	#50-70 Roller Chain (Prior to serial #09T2201)
	11-0009	1	#50-72 Roller Chain (Serial #09T2201 & Later)
14	10-0064	1	Sprkt 50B19 1"B (Prior to serial #09T2201)
	10-0042	1	Sprkt 50B24 1"B (Serial #09T2201 & Later)
15	25-0197	1	Door Catch Assembly
16	10-0010	1	Sprkt 50B24 1-1/4" Bore (Prior to serial #09T2201)
	10-0035	1	Sprkt 50B19 1-1/4" Bore (Serial #09T2201 & Later)
17	10-0061	1	Idler Sprocket 50C17 w/Needle Brg
18	14-0026	1	1-1/8" B Needle Bearing Only
19	11-0111	1	Roller Chain - #50 (144 links) (Prior to serial #09T2201)
	11-0140	1	Roller Chain - #50 (142 links) (Serial #09T2201 & Later)
20	23-0044	1	Idler Shaft
21	25-0160	1	Idler Bracket Weldment
22	23-0045	1	Lower Shaft
23	25-0161-1	2	Chain Tensioner Bracket
24	29-0002	2	Tensioner Spring
25	41-0001	2	Tightener, 5" Nylon Slide
26	10-0060	1	Sprkt 50B42 1" B, 3200/4200
27	11-0089	1	#50-82 Roller Chain for 3200/4200
28	25-0198	1	Shield Mount Plate
29	24-0112-4	1	Shield Support with Hinge
30	44-0047	1	TSS Frt Idler Shaft Asm.
31	12-0011-HD	8	Guide Pins, 1/2" Dia.
32	38-0013	1	Roll Pin, 5/16x1-3/4
33	851-3118-3.5Z	2	5/16x3-1/2 MB GR5
34	43-0013	4	Spacer Plate
35	14-0029	1	1-1/4" Thrust Bearing
36	21-0001	1	Collar, Clutch Shifter-Brass
37*	25-0184	1	Idler Brkt Plate & Shaft Wldmt
38*	25-0183-RHH	1	Tightener Bracket Wldmt (High)
39*	25-0183-RHL	1	Tightener Bracket Wldmt (Low)
40	24-0112-1	1	Plastic Door Only
41*	44-0047-RH	1	RH TSS Frt Idler Shaft Assy
42	19-0055-4-19	1	1" ID Snap Ring
43	815-3118-Z	2	5/16" Nylon Insert Lock Nut
44	35-0002	1	1/4x1-1/4" Woodruff Key
45	808-1.13-1.75-18	A/R	18 Ga. 1-1/8 ID Machine Bushing
46	24-0112-K	1	Shield Assembly- LH Unload
	24-0110-RH	1	RH Cluster Shield (not shown)
	24-0098	1	RH Cluster Door (not shown)
47	12-0015K	1	Upper Sheave Kit Complete
48	12-0009K	1	Lower Sheave Kit Complete
49	33-0018	2	1 1/4" Snap Ring
50	808-1.25-1.875-10	A/R	10 Ga. 1-1/4 ID Machine Bushing
51	808-1.25-1.875-14	A/R	14 Ga. 1-1/4 ID Machine Bushing
52	808-1.25-1.875-18	A/R	18 Ga. 1-1/4 ID Machine Bushing
53	33-0030-RH	1	Idler Shaft Grease Bolt, 1/2"x3/4"
54	30-0004	1	1/4"-28 90° Grease Fitting
55	33-0044	1	Manual Holder w/Cap

* These items for RH discharge units only

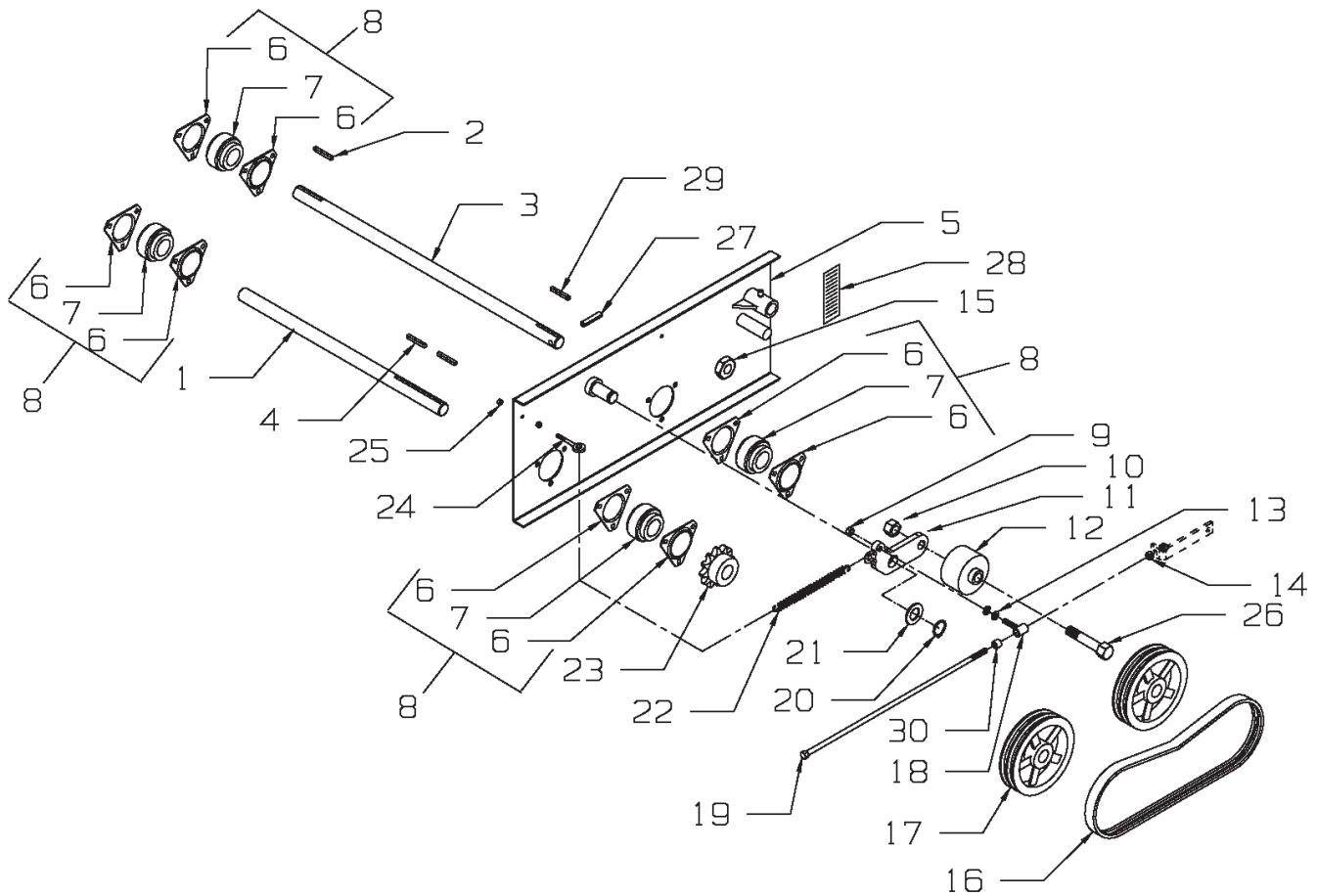
TSS AUGERS & AUGER DRIVE



IF YOUR UNIT IS OPTIONAL RH DISCHARGE, OPPOSITE TO ILLUSTRATION, SPECIFY LISTED PART NO. FOLLOWED BY -RH

KEY	PART NO.	QTY	DESCRIPTION
1	35-0006	4	Key 3/8x1-1/4
2	41-0009	1	Lower Auger Drive Chain Tightener Assembly
2A	25-0047	1	Mounting Bracket
2B	29-0002	2	Spring
2C	41-0002	1	Tightener, 3" Nylon Slide
3	14-0003-2		1-1/4 Bearing Flange, 2 Hole
4	14-0002-3	5	Bearing w/Collar 1-1/4
5	14-0002-2	4	1-1/4 Bearing Flange, 3 Hole
6	10-0012	4	Sprocket 50B17, 1-1/4 Bore, 3/8" Keyway
7	25-0186	1	Top Auger Mounting Bracket w/Tightener Bracket
8	25-0142	1	Top Auger Mounting Bracket
9	11-0087	1	Lower Auger #50-95 Roller Chain
10	26-0034	2	Auger 2nd & 3rd
11	26-0033	1	Lower Auger 1/4"Key (Prior to serial #09T2201)
	26-0036	1	Lower Auger 5/16"Key (Serial #09T2201 & Later)
12	35-0012	1	Key 1/4x1-1/2" (Prior to serial #04T2201)
	35-0028	1	Key 1/4x1-1/4" (Serial #04T2201 through #09T2200)
	35-0030	1	Key 5/16x1-1/4" (Serial #09T2201 & Later)
13	24-0092	1	Upper Auger Chain Guard
14	24-0101	1	Lower Auger Chain Guard
15	11-0074	1	Upper Auger #50-94 Roller Chain

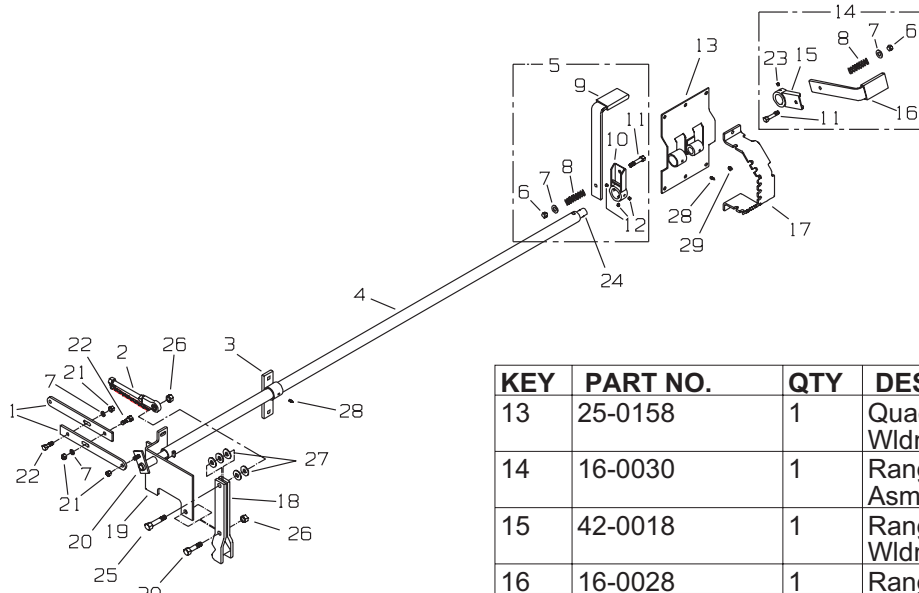
3200-4200 SERIES
INDEPENDENT OUTFEED CLUTCH DRIVE
“STOP” & “RUN” CONTROL RELATED PARTS



KEY	PART NO.	QTY	DESCRIPTION
1	23-0081	1	Clutch Drive Idler Shaft
2	35-0016	1	1/4" x 1/4" x 2-1/4" Key
3	23-0082	1	2-Way Unit Center Shaft
4	35-0001	2	1/4" x 1/4" x 1-1/8" Key
5	25-0267	1	Clutch Plate Weldment w/Jam Nut
6	14-0002-2	8	Flange, 3 Hole, 1-1/4"
7	14-0002-3	4	Bearing, 1-1/4" w/Collar
8	14-0002	4	Bearing Assembly, 1-1/4"
9	814-3816-Z	1	3/8" -16 Indented Lock Nut
10	933-3621	1	3/4" -10 Jam Nut
11	25-0260-4	1	Clutch Tightener Arm Weldment
12	912-0002-1	1	Tightener Roller 2" (Rubber)
13	805-0038-Z	2	3/8" Flat Washer
14	813-3816-Z	1	3/8" -16 Regular Nut
15	826-1014	1	1" -14 Jam Nut (Only)
16	49-0023	1	Clutch, Double V-Belt
17	12-0020	2	8" Double Pulley, 1-1/4"B, 1/4" KWW

KEY	PART NO.	QTY	DESCRIPTION
18	16-0041	1	Linkage Pivot Sleeve Weldment
19	801-3816-17.5	1	3/8" -16 x 17-1/2" HHCS
20	33-0020	1	Retaining Ring
21	808-1-1.15-18	A/R	18 Ga. 1" ID Machine Bushing
22	29-0005	1	Extension Spring
23	10-0004	1	50B17 Sprocket, 1-1/4"B, 1/4" KWW
24	811-2520-2.5Z	1	1/4" -20 x 2-1/2" Eye Bolt - Zinc
25	810-2520-Z	2	1/4" -20 Flange Spin Lock Nut
26	851-7510-3Z	1	3/4" -10 x 3" GR5 MB ZN
27	38-0015	1	5/16" x 2" Roll Pin
28	46-0001-68	1	Rear Unload Engage/Disengage Decal
29	35-0021	1	1/4" x 1/4" x 1-3/4" Key
30	43-0022		Spacer

VARIABLE SPEED SHIFTER CONTROLS AND EMERGENCY STOP CLUTCH RELATED PARTS



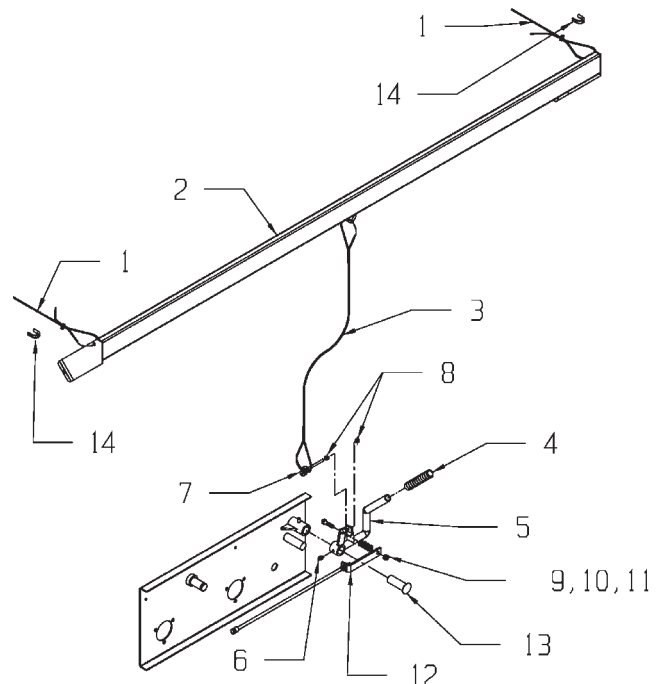
KEY	PART NO.	QTY	DESCRIPTION
1	42-0022-1	2	Linkage Bar
2	42-0021	1	Bolt w/chain& Eyelet
3	42-0013	1	Pipe Guide Bracket Asm.
4	16-0031	1	Speed Control Pipe
5	16-0029	1	Speed Control Handle Asm.
6	814-3816-Z	2	3/8 Locknut (Zinc)
7	805-0038- Z	4	3/8 Flat Washer (Zinc)
8	29-0008	2	Spring
9	42- 0020	1	Speed Control Handle
10	42-0019	1	Speed Control Hub Wldmt
11	851-3816-2Z	1	3/8x2 Machine Bolt
12	827-3118-.38	3	5/16x3/8 Set Screw

KEY	PART NO.	QTY	DESCRIPTION
13	25-0158	1	Quadrant Bracket Wldmt
14	16-0030	1	Range Control Handle Asm.
15	42-0018	1	Range Control Hub Wldmt
16	16-0028	1	Range Control Handle
17	25-0154	1	Control Quadrant
18	25-0151	1	Control Asm.
19	25-0157	1	Speed Control Bracket
20	16-0032-2	1	Range Control Pipe Ear
21	814-3816-Z	3	3/8 Locknut (Zinc)
22	851-3816-1.25Z	2	Bolt 3/8-16x1.25
23	38-0003	1	Roll Pin
24	16-0032	1	Range Control Pipe Asm.
25	851-5013-2.5Z	1	1/2-13x2-1/2" Bolt
26	814-5013-Z	2	1/2-13 Lock Nut
27	828-0050-Z	5	1/2" Washer
28	30-0001	2	1/4" Grease Zerk
29	30-0003	1	1/4" 45° Grease Zerk
30	851-5013-2Z	1	Bolt 1/2x2

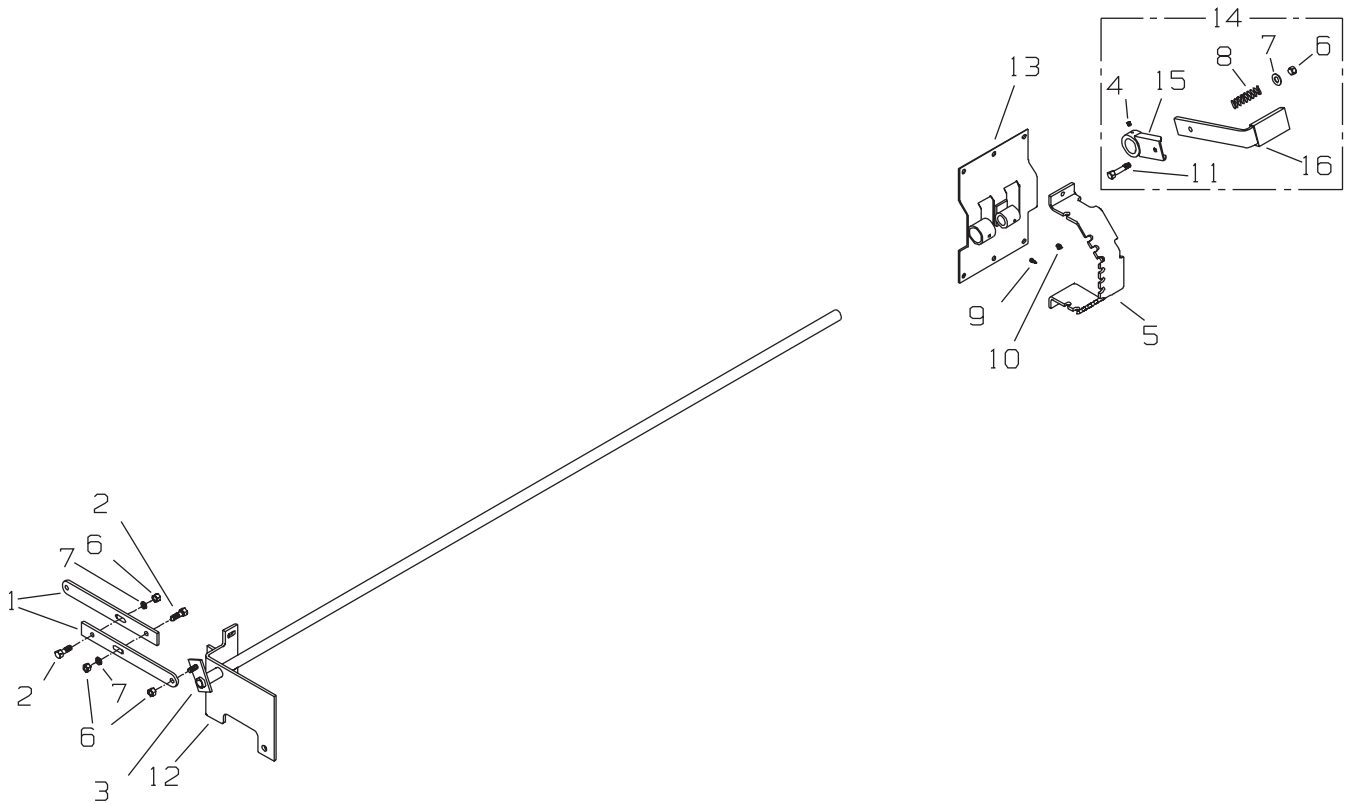
IF YOUR UNIT IS OPTIONAL RH DISCHARGE, OPPOSITE TO ILLUSTRATION, SPECIFY LISTED PART NO. FOLLOWED BY -RH

INDEPENDENT OUTFEED CLUTCH

KEY	PART	QTY	DESCRIPTION
1	36-0001	2	Cables, Emergency Stop
2	16-0010	1	Push Bar, Emergency Stop, Control
3	36-0002	1	Cable, Emergency Stop Front,
4	51-0003	1	7/8" ID Rubber Grip Only
5	16-0044	1	I.O.C. Clutch Handle - Weldment
6	30-0001	1	1/4"-28 Straight Grease Fitting
7	811-2520-1Z	1	1/4"-20x1" Eye Bolt - Zinc
8	814-2520-Z	1	1/4"-20 Indented Lock Nut
9	851-3816-1.5Z	1	3/8"-16x1-1/2" Machine Bolt - Zinc GR5
10	805-0038-Z	4	3/8" Flat Washer
11	814-3816-Z	1	3/8"-16 Indented Lock Nut
12	25-0268-1	1	Linkage Extension Plate
13	25-0279	1	Pivot Shaft Weldment
14	33-0048	2	Cable Thimble



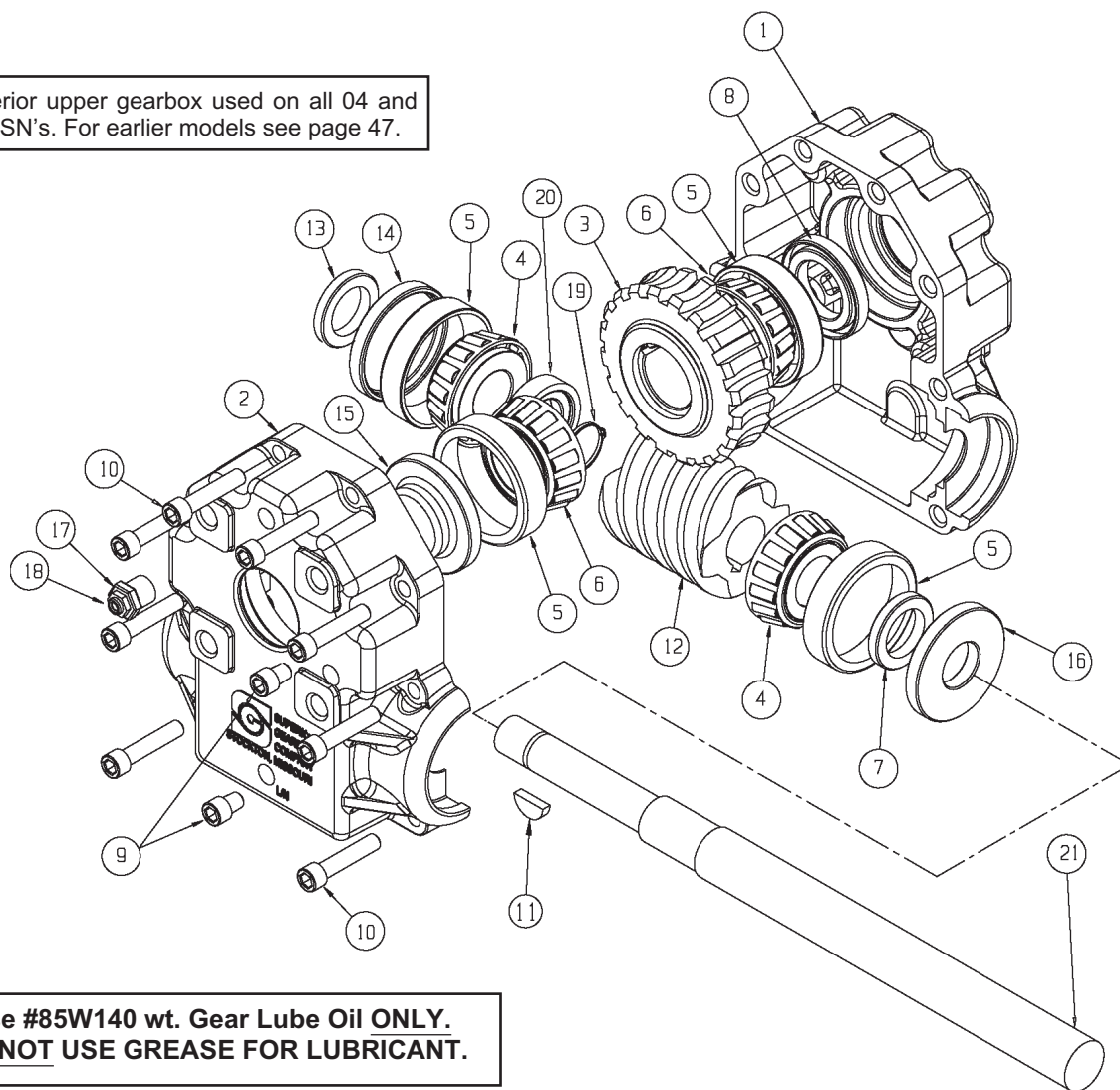
TWO SPEED HI-LO SHIFTER CONTROL



KEY	PART NO.	QTY	DESCRIPTION
1	42-0022-1	2	Linkage Bar
2	851-3816-1.25Z	2	Bolt 3/8-16x1.25
3	16-0032-2	1	Range Control Pipe Ear
4	38-0003	1	Roll Pin 1/4 x 1-1/4"
5	25-0154	1	Control Quadrant
6	814-3816-Z	4	3/8 Locknut (Zinc)
7	805-0038- Z	3	3/8 Flat Washer (Zinc)
8	29-0008	1	Spring
9	30-0001	2	1/4" Grease Zerk
10	30-0003	1	1/4" 45° Grease Zerk
11	851-3816-2Z	1	3/8x2 Machine Bolt
12	25-0157	1	Speed Control Bracket
13	25-0158	1	Quadrant Bracket Wldmt
14	16-0030	1	Range Control Handle Asm.
15	42-0018	1	Range Control Wldmt
16	16-0028	1	Range Control Handle

UPPER GEAR BOX WITH INPUT SHAFT ASSEMBLY

Superior upper gearbox used on all 04 and later SN's. For earlier models see page 47.



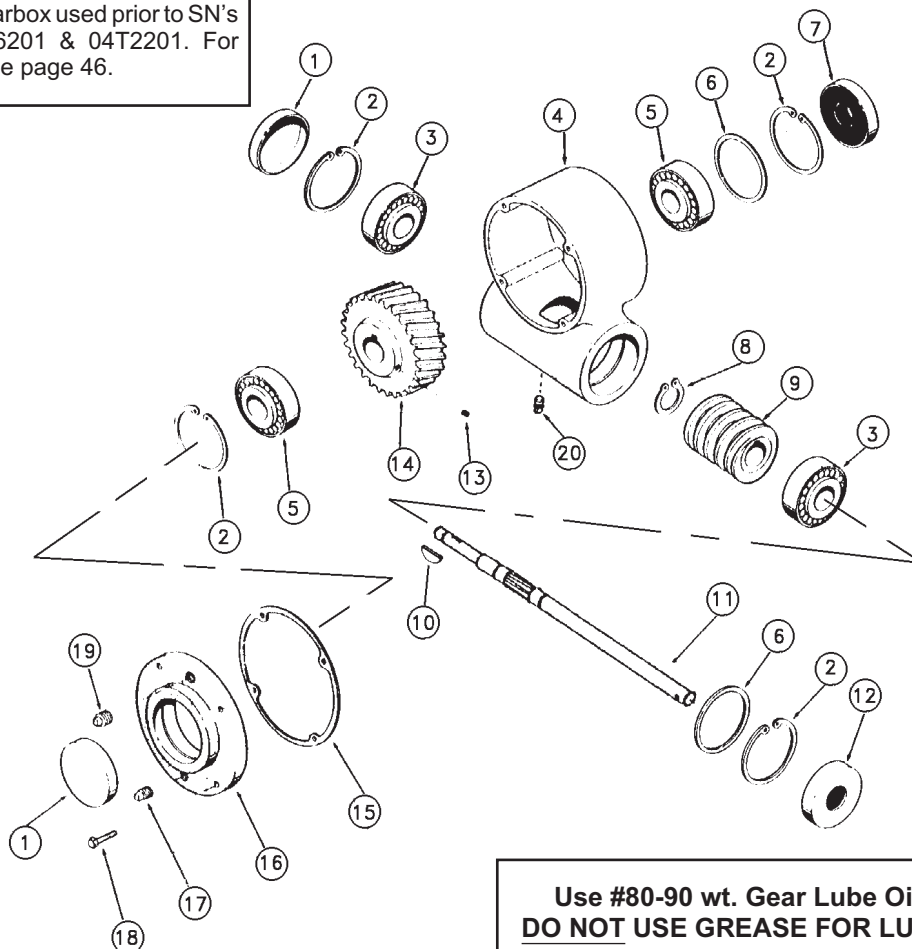
**Use #85W140 wt. Gear Lube Oil ONLY.
DO NOT USE GREASE FOR LUBRICANT.**

KEY	PART NO.	QTY	DESCRIPTION
	19-0055	1	Upper Gearbox w/ Input Shaft, 5:1, 1/4"Key (Prior to serial #09T2201)
	19-0058	1	Upper Gearbox w/ Input Shaft, 10:1, 5/16"Key (Serial #09T2201 & Later)
	19-0055-4	1	Upper Gearbox w/o Input Shaft, 5:1, 1/4"Key (Prior to serial #09T2201)
	19-0058-4	1	Upper Gearbox w/o Input Shaft, 10:1, 5/16"Key (Serial #09T2201 & Later)
1	19-0055-4-1	1	Tapped Gearbox Casting
2	19-0055-4-2	1	Thru Hole Casting
3	19-0055-4-3	1	Gear, 5:1, 1/4"Key (Prior to serial #09T2201)
	19-0058-4-2	1	Gear, 10:1, 5/16"Key (Serial #09T2201 & Later)
4	19-0055-4-4	2	Bearing Cone
5	19-0055-4-5	4	Bearing Cup
6	19-0055-4-6	2	Bearing Cone
7	19-0024-12	1	Seal 1" ID x 1 1/2" OD
8	19-0016-10	1	Seal 1 1/4" ID x 2" OD
9	19-0055-4-9	2	Plug, 1/4-18 NPT Plug

KEY	PART NO.	QTY	DESCRIPTION
10	19-0055-4-10	AR	Bolt 5/16-18 x 1 1/2" SHCS
	19-0055-4-11	AR	Bolt 5/16-18 x 1 3/4" SHCS
	19-0055-4-21	AR	Bolt 5/16-18 x 1 1/4" SHCS
11	19-0003-6	1	Woodruff Key
12	19-0055-4-12	1	Rolled Worm Gear (Prior to serial #09T2201)
	19-0058-4-3	1	Rolled Worm Gear (Serial #09T2201 & Later)
13	19-0024-28	1	End Cap 1 1/2"
14	19-0024-19	1	End Cap 2 5/16"
15	19-0055-4-15	1	End Cap 2"
16	19-0024-27	1	Seal 1" ID x 2 5/16" OD
17	19-0055-4-17	1	Bushing 1/4" NPT x 1/8" NPT
18	19-0055-4-18	1	Vent Plug 5 PSI
19	19-0055-4-19	1	External Retaining Ring 1.0 Shaft
20	19-0055-4-20	1	1" ID Spacer
21	19-0015-1	1	TSS Input Shaft

#19-0015 UPPER GEAR BOX WITH INPUT SHAFT ASSEMBLY

Durst upper gearbox used prior to SN's 04T5201, 04T6201 & 04T2201. For later models see page 46.

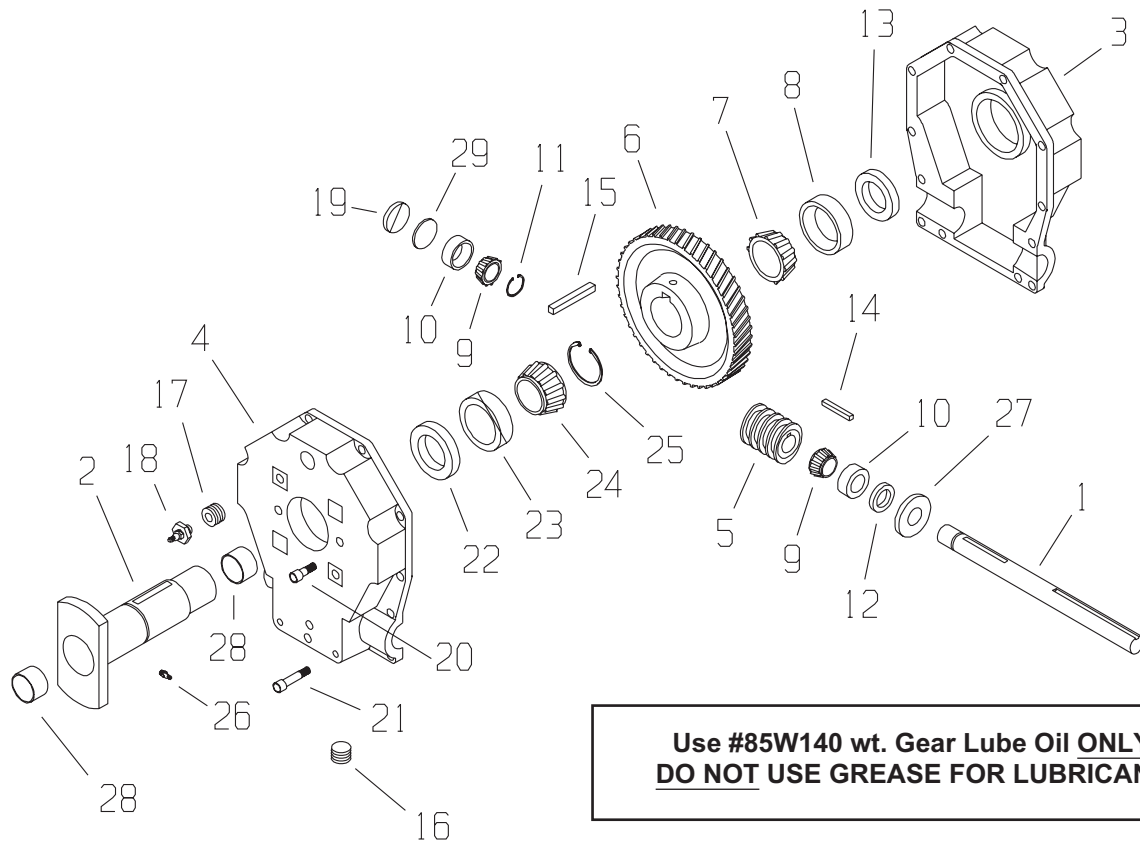


**Use #80-90 wt. Gear Lube Oil ONLY.
DO NOT USE GREASE FOR LUBRICANT.**

KEY	PART NO.	QTY	DESCRIPTION
	19-0015	1	Upper gearbox w/ Input Shaft
	19-0015-4	1	Upper Gearbox w/o Input Shaft
1	19-0003-1	2	Cap
2	19-0002-2	4	Snap Ring
3	19-0055-4-4	2	Bearing Cone
	19-0002-4	2	Bearing Cup
4	19-0003-2	1	Housing
5	19-0055-4-6	2	Bearing Cone
	19-0055-4-5	2	Bearing Cup
6	19-0002-12	AR	Shim
7	19-0003-4	1	Output Seal
8	19-0002-8	1	Snap Ring
9	19-0015-3	1	Hardened Worm
10	19-0003-6	1	Woodruff Key
11	19-0015-1	1	Input Shaft
12	19-0002-13	1	Input Seal
13	19-0003-7	1	Set Screw
14	19-0015-2	1	Bronze Gear

KEY	PART NO.	QTY	DESCRIPTION
	19-0015	1	Upper gearbox w/ Input Shaft
15	19-0002-19	1	Gasket
16	19-0003-9	1	Cover
17	19-0002-17	1	Vent Plug
18	19-0002-14	4	Cap Screw
19	19-0003-10	1	Level Plug
20	19-0003-12	1	Drain Plug

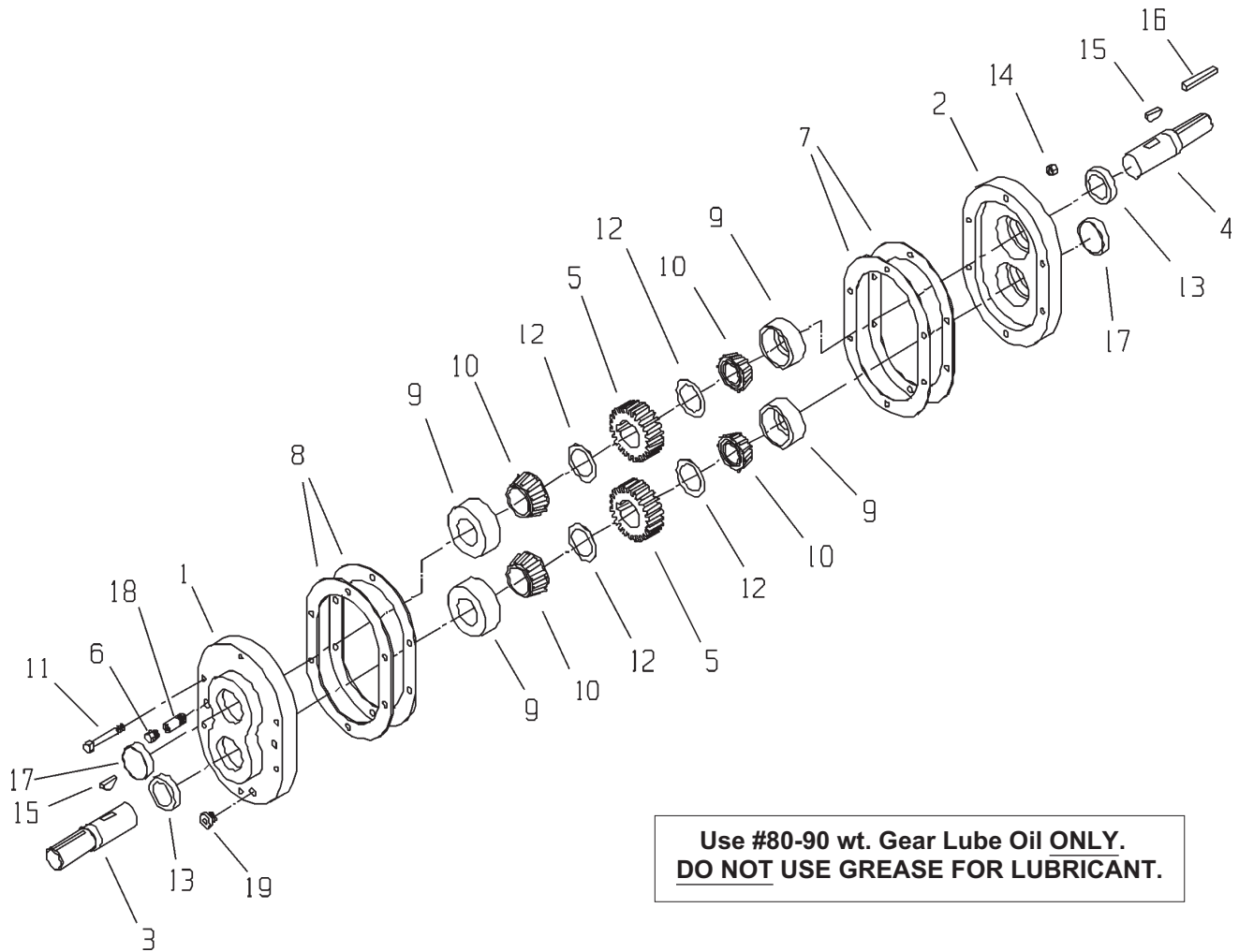
#19-0024
50:1 RATIO, FRONT, LOWER GEARBOX
3200 & 4200 SERIES



KEY	PART NO.	QTY	DESCRIPTION
1	19-0024-1	1	Input Shaft 1" Dia.
2	19-0024-2	1	Output Shaft 2.25" Dia. (Hollow)
3	19-0024-3	1	Casting, Tapped Holes
4	19-0024-4	1	Casting, Through Holes
5	19-0024-5	1	Worm, 2 Lead RH
6	19-0024-6	1	Worm Gear, RH
7	19-0004-7	1	Bearing Cone, 2" ID
8	19-0024-8	1	Bearing Cup
9	19-0002-3	2	Bearing Cone, 1" ID
10	19-0002-4	2	Bearing Cup
11	19-0024-11	1	Retaining Ring, 1" Shaft
12	19-0024-12	1	Seal, 1" Shaft
13	19-0024-13	1	Seal, 2" Shaft
14	19-0024-14	1	Key, 1/4" SQ
15	19-0024-15	1	Key, 3/8"
16	19-0016-5	4	Plain Plug, 1/2" NPT
17	19-0023-2	1	Bushing, 1/2" to 1/8" NPT
18	19-0002-17	1	Pressure Relief, 5psi

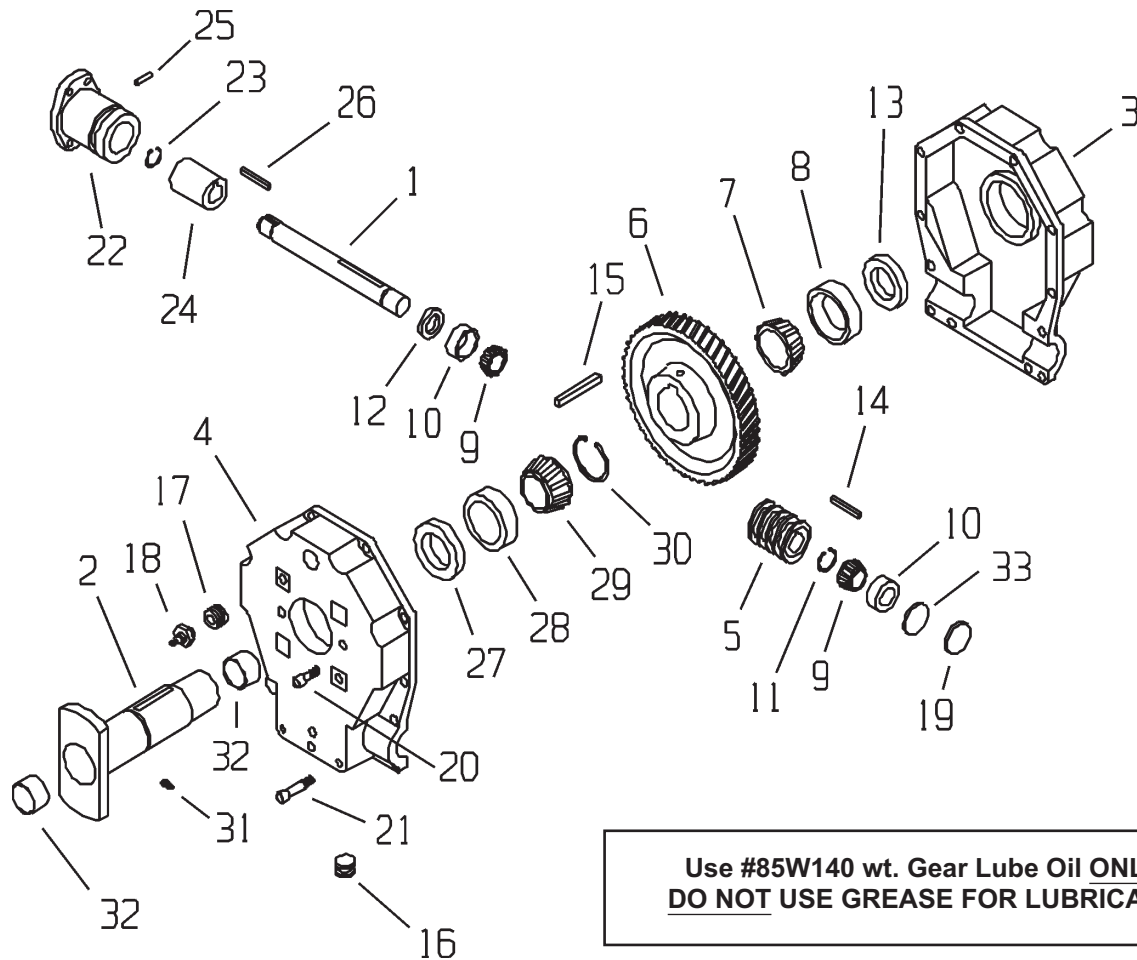
KEY	PART NO.	QTY	DESCRIPTION
19	19-0024-19	1	End Plug, Input Shaft, - 2- 5/16" OD
20	19-0024-20	10	SHCS 3/8x1-1/2"
21	19-0016-11	4	SHCS 3/8x2-1/4"
22	19-0024-22	1	Seal 2.25" ID
23	19-0024-23	1	Bearing Cup
24	19-0024-24	1	Bearing Cone, 2.25" ID
25	19-0024-25	1	Retaining Ring 2.25"
26	19-0024-26	1	Grease Zerk
27	19-0024-27	1	Dust Seal, Input
28	13-0010	2	Quill Bushing
29	19-0024-28	1	End Cap, Rubber Cover - 11/2" OD

#19-0032
1:1 RATIO, REAR GEARBOX (PARALLEL SHAFT)
3200 & 4200 SERIES



KEY	PART	QTY	DESCRIPTION
1	19-0032-1	1	Housing ½
2	19-0032-2	1	Housing ½
3	19-0032-3	1	Shaft, Input (1-1/4" Diameter Stub Shaft)
4	19-0032-4	1	Shaft, Output (1" Diameter Stub Shaft)
5	19-0032-5	2	Gear, Spur 30 Teeth
6	19-0032-20	1	Plug, Vented
7	19-0032-7	2	Shim, .002 Red
8	19-0032-8	2	Shim, .005 Blue
9	19-0032-9	4	Cup, Race
10	19-0032-10	4	Cone, Bearing
11	19-0032-11	6	5/16" -18 x 2 ½" GR5 Machine Bolt
12	19-0032-12	4	Shim
13	19-0032-21	2	Seal
14	19-0032-14	6	Nut, Hex 5/16" -18
15	19-0032-15	2	Woodruff Key, 5/16" x 1"
16	35-0021-H	1	1/4 x 1/4 x 1 3/4 Hardened Key
17	19-0032-17	2	Plug, Expansion
18	19-0032-18	1	Bushing, Pipe 3/8" x 1/8" NPT
19	19-0032-19	3	Plug, Pipe Socket 3/8" NPT

#19-0025
25:1 RATIO, REAR GEARBOX
3200 & 4200 SERIES

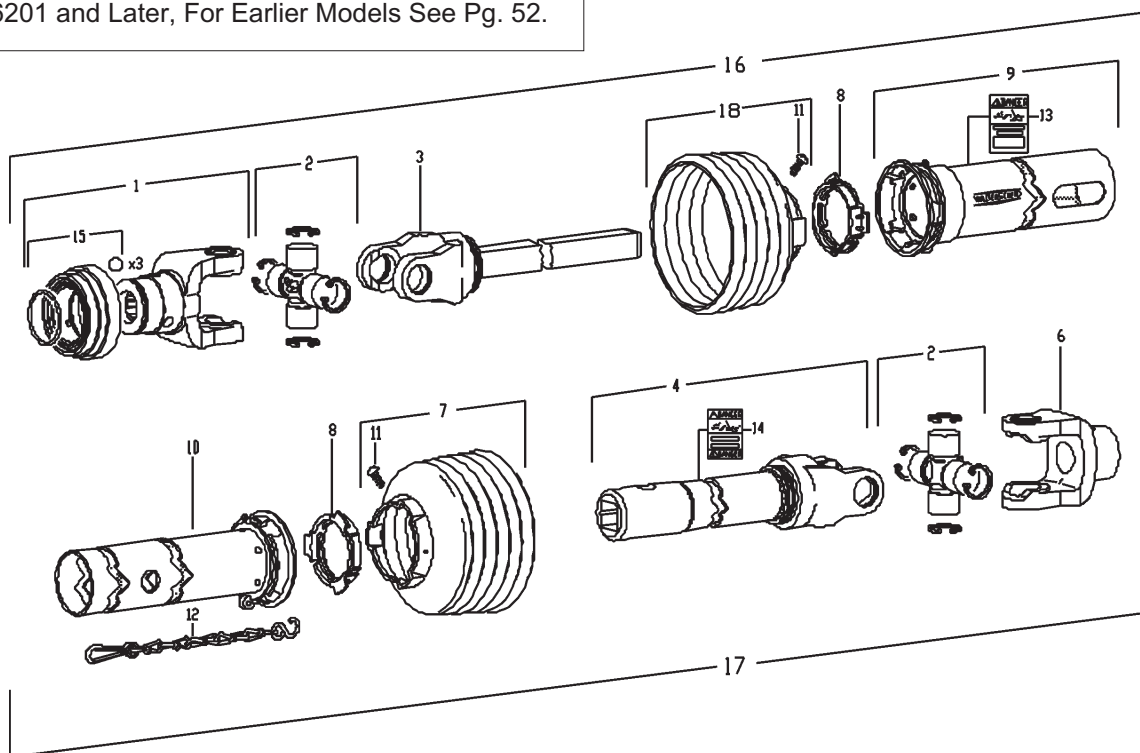


KEY	PART NO.	QTY	DESCRIPTION
1	19-0025-1	1	Input Shaft 1" Dia.
2	19-0024-2	1	Output Shaft 2.25" Dia. (Hollow)
3	19-0024-3	1	Casting, Tapped Holes
4	19-0024-4	1	Casting, Through Holes
5	19-0025-7	1	Worm, 2 Lead RH
6	19-0025-8	1	Worm Gear, RH
7	19-0004-7	1	Bearing Cone, 2" ID
8	19-0024-8	1	Bearing Cup
9	19-0002-3	2	Bearing Cone, 1" ID
10	19-0002-4	2	Bearing Cup
11	19-0024-11	1	Retaining Ring, 1" Shaft
12	19-0024-12	1	Seal, 1" Shaft
13	19-0024-13	1	Seal, 2" Shaft
14	19-0024-14	1	Key, 1/4" SQ
15	19-0024-15	1	Key, 3/8"
16	19-0016-5	4	Plain Plug, 1/2" NPT
17	19-0023-2	1	Bushing, 1/2" to 1/8" NPT
18	19-0002-17	1	Pressure Relief, 5psi

KEY	PART NO.	QTY	DESCRIPTION
19	19-0024-19	1	End Plug, Input Shaft, 2-5/16" OD
20	19-0024-20	10	SHCS 3/8x1-1/2"
21	19-0016-11	4	SHCS 3/8x2-1/4"
22	19-0025-2	1	Hydraulic Adapter, 4 Bolt
23	19-0025-4	1	Retaining Ring (#5000-100)
24	19-0025-3	1	Hydraulic Sleeve
25	19-0025-5	1	Pin (Hydraulic Adapter)
26	19-0025-6	1	Key, 1/4x1.46"
27	19-0024-22	1	Seal 2.25" ID
28	19-0024-23	1	Bearing Cup
29	19-0024-24	1	Bearing Cone, 2.25" ID
30	19-0024-25	1	Retaining Ring 2.25"
31	19-0024-26	1	Grease Zerk
32	13-0010	2	Quill Bushing
33	19-0024-28	1	End Cap, Rubber Cover, 1-1/2" OD

#18-0117 UNIVERSAL JOINT TELESCOPING ASSEMBLY

Walterscheid PTO used on SN 05T2201, 05T5201, 05T6201 and Later, For Earlier Models See Pg. 52.

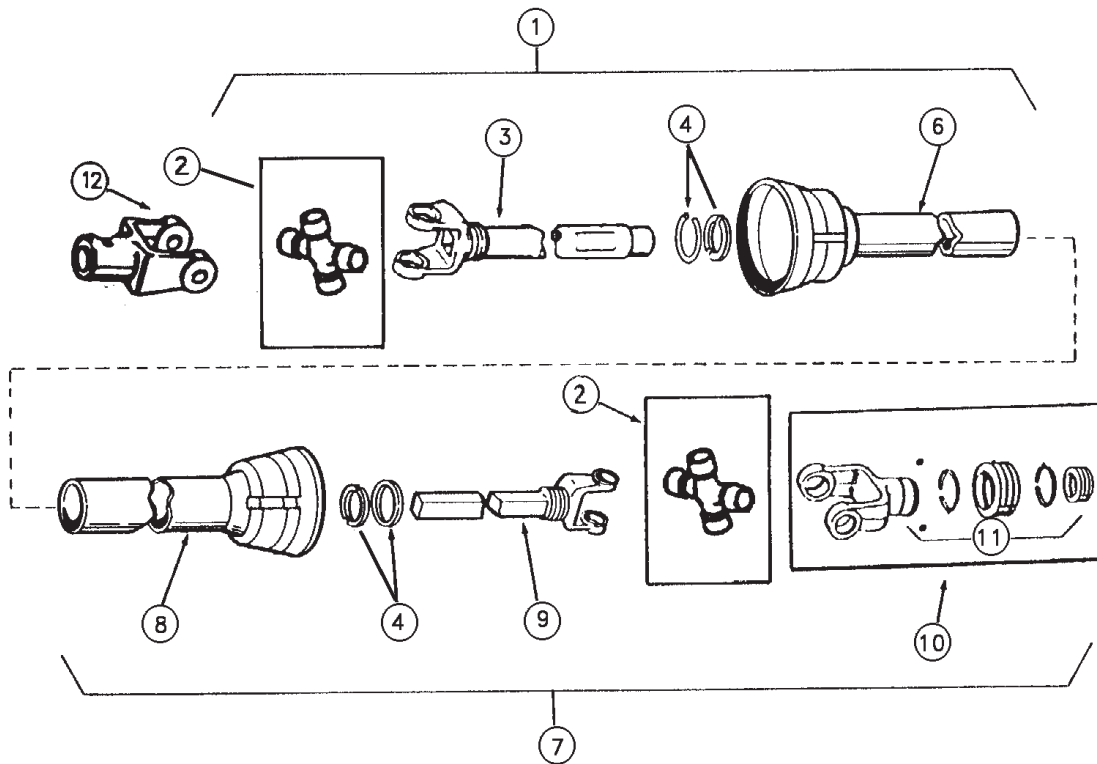


KEY	PART NO.	QTY	DESCRIPTION
	18-0117	1	Joint Assembly
1	18-0117-1-1	1	3/8-6 Spline Yoke ASGE
2	18-0117-1-2	2	Cross and Bearing Kit
3	18-0117-1-3	1	Inboard Yoke and Bar Welded Assy.
4	18-0117-2-1	1	Inboard Yoke, Tube and Sleeve Welded Assy.
6	18-0117-2-2	1	1 1/4" Bore, 1/4" Key Yoke
7	18-0117-1-4	1	Shield Cone 5-Rib
8	918-0208-2-4	2	Bearing Ring SC25
9	18-0117-1-6	1	Outer Shield Tube Oval
10	18-0117-2-3	1	Inner Shield Tube Round
11	918-0208-2-9	2	Screw-Included in Item #7
12	918-0208-2-7	1	Safety Chain
13	918-0208-2-8	1	Decal Outer-Included in Item #9
14	918-0208-1-10	1	Decal Inner-Included in Item #4
15	18-0117-1-1-1	1	ASGE Collar Kit-Included in Item #1
16	18-0117-1	1	Tractor Male Half Complete
17	18-0117-2	1	Implement Female Half Shaft Complete
18	18-0117-1-7	1	Shield Cone 4-Rib

#18-0017

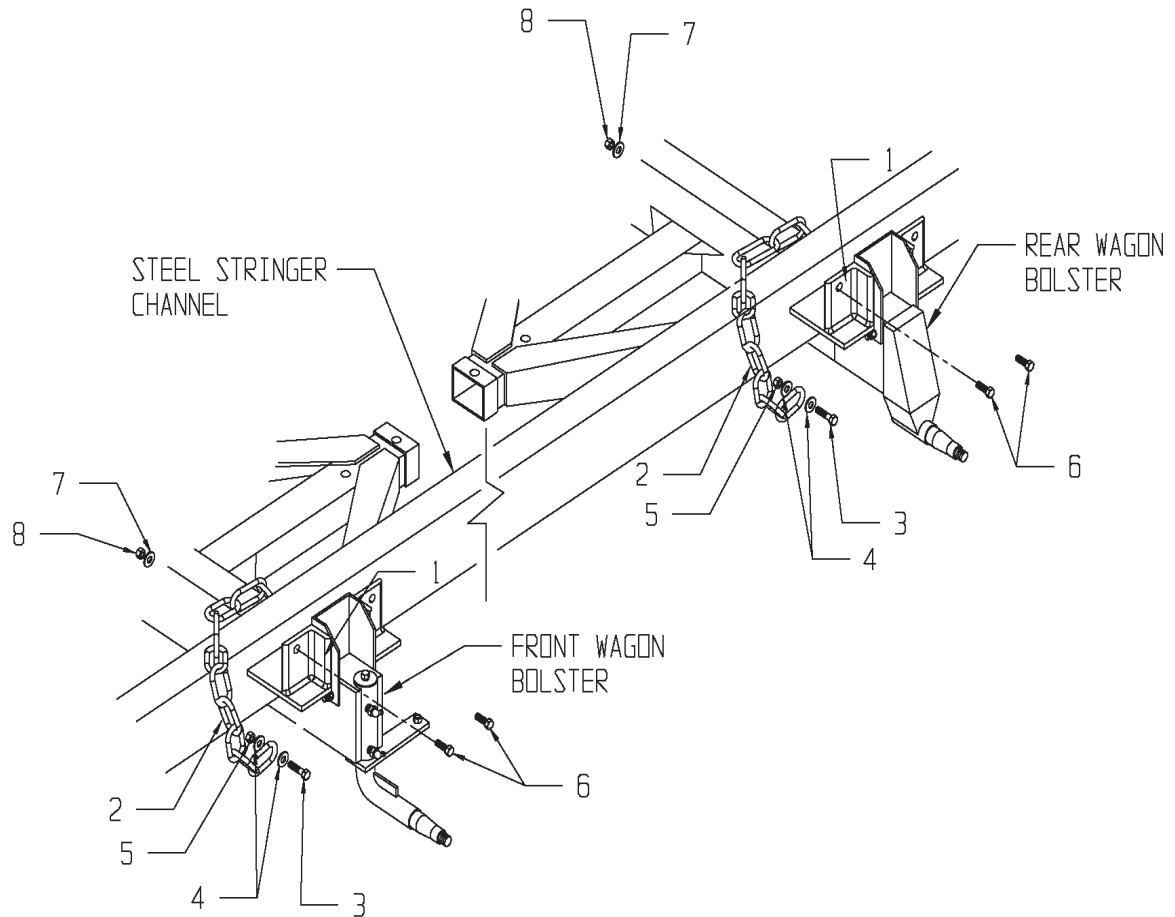
12R UNIVERSAL JOINT TELESOPING ASSEMBLY W/GUARD

Weasler PTO used Prior To SN 05T2201, 05T5201, 05T6201. For Later Models See Pg. 51.



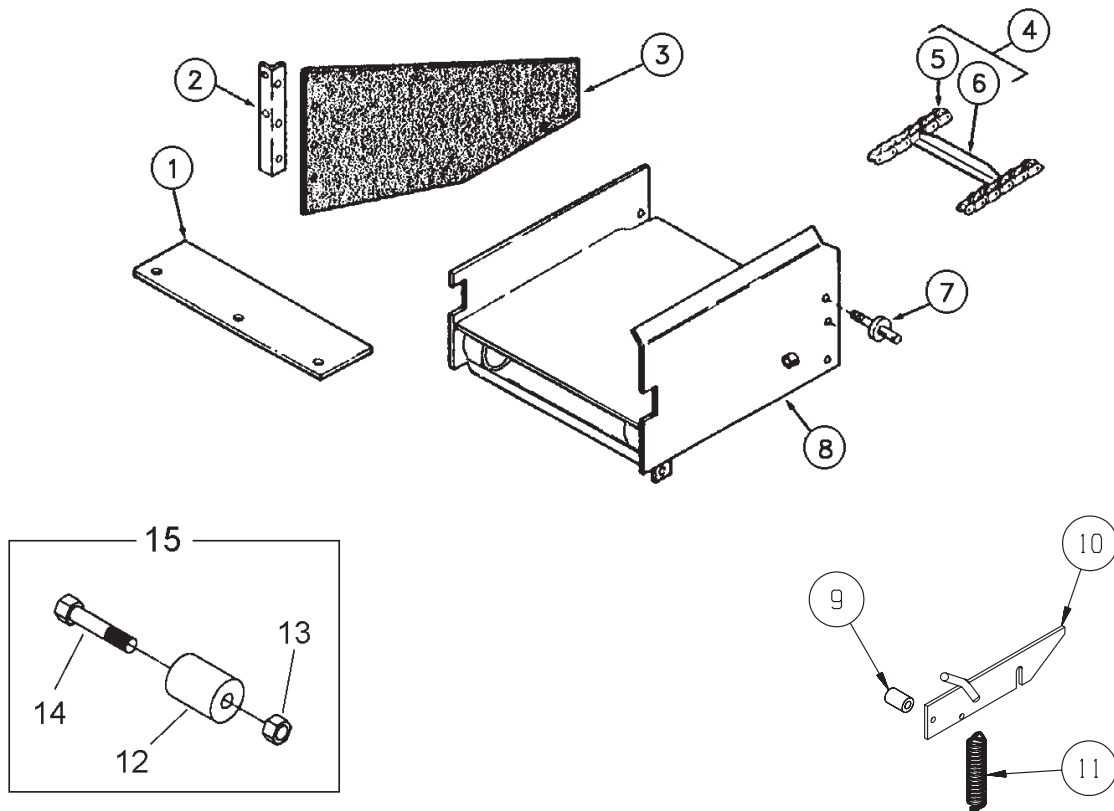
KEY	PART NO.	QTY	DESCRIPTION
	18-0017	1	Joint Assy, 12R Universal #222-17134
1	18-0017-4	1	Joint & Tube Half w/guard (implement half)
2	18-0017-9	2	12R Cross & Bearing Kit
3	18-0017-6	1	Yoke, Tube & Slip Sleeve
4	18-0017-10	2	Nylon Repair Kit
6	18-0017-12	1	Inner Guard w/Bearing & Retainer
7	18-0017-1	1	Joint & Shaft Half w/guard (tractor half)
8	18-0017-11	1	Outer Guard w/Bearing & Retainer
9	18-0017-3	1	Yoke & Shaft
10	18-0017-7	1	Spring - Lock Yoke Assembly
11	18-0005-16	1	Spring - Lock Repair Kit
12	18-0017-13	1	Yoke, 1-1/4" Bore, 1/4" KQY, w/RP Hole

#52-0003S STEEL STRINGER TIE DOWN KIT



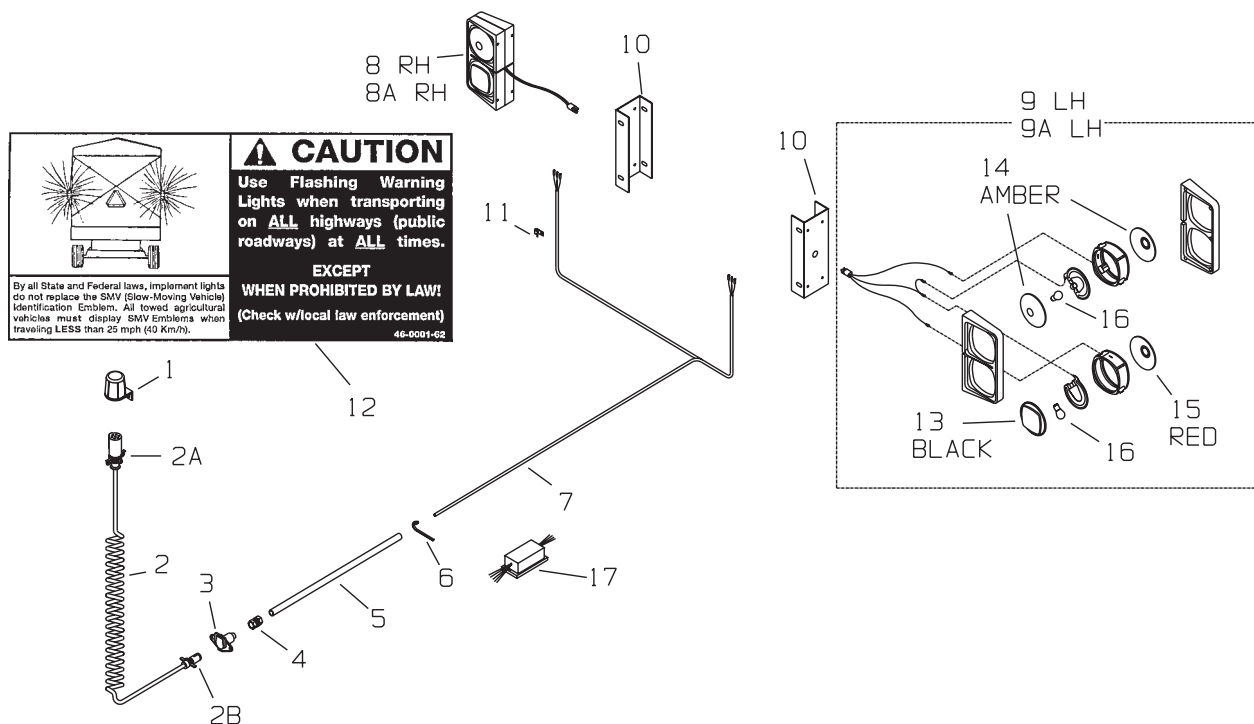
KEY	PART NO.	QTY.	DESCRIPTION
	52-0003S	1	Tie Down Kit (Steel Stringers)
1	25-0084	4	Bracket
2	52-0003-1	4	Chain
3	851-3816-1.5Z	4	Bolt, Hex Machine-3/8x1-1/2
4	805-0038-Z	8	3/8 Flat Washer
5	815-3816-Z	4	3/8 Lock Nut
6	851-5013-1.5-Z	8	1/2x1-1/2 Hex Machine Bolt
7	805-0050-Z	8	1/2 Flat Washers
8	815-5013-Z	8	1/2 Lock Nuts

#52-0001TK
TSS 12" OPTIONAL EXTENSION KIT
 (Regular LH Unloading)



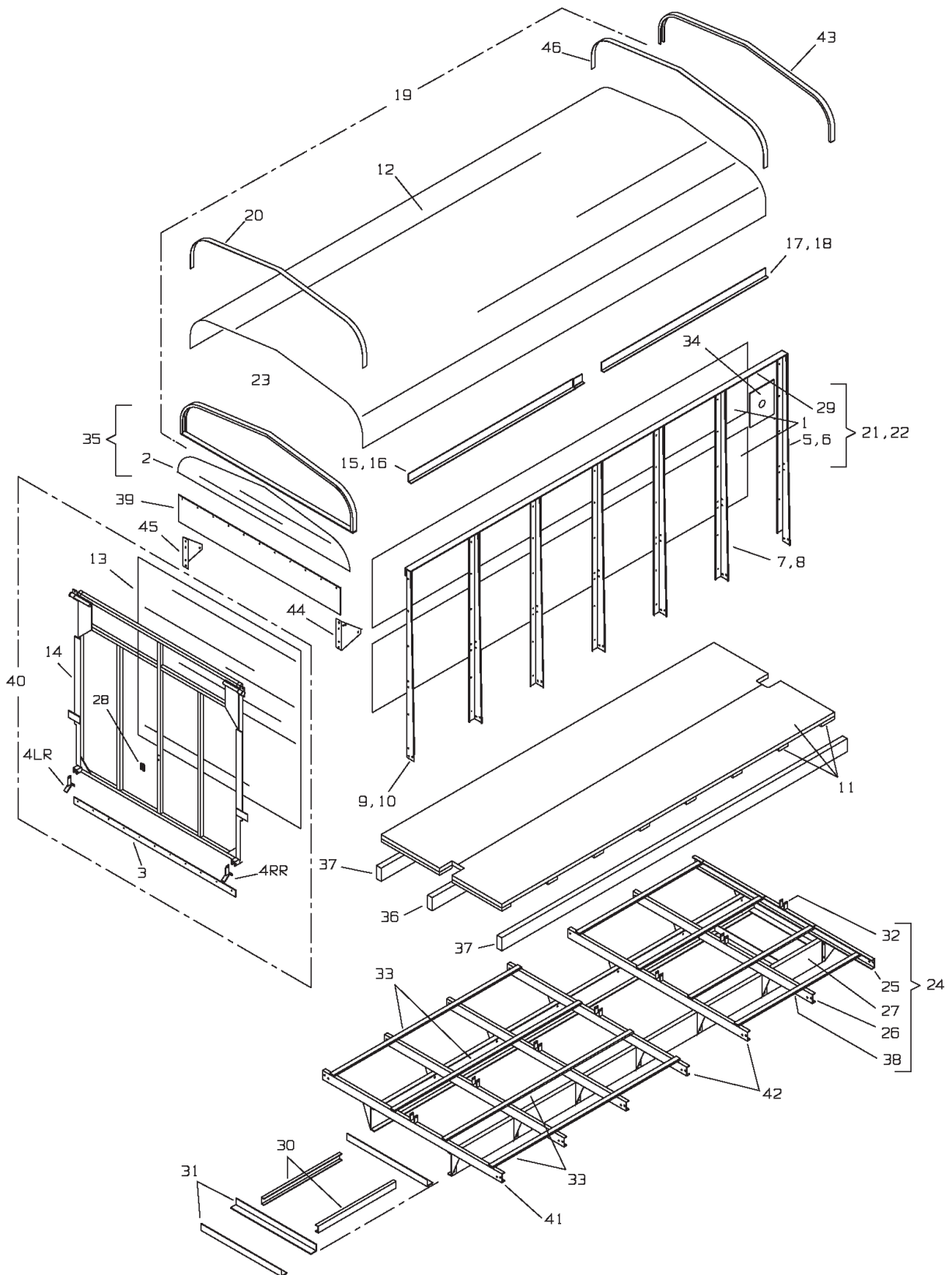
KEY	PART NO.	QTY	DESCRIPTION
	52-0001TK	1	TSS Optional Extension Kit
1	24-0068	1	Shield, Cross Apron Top Panel
2	25-0075	1	Angle, Belting Shield Mount
3	49-0004	1	Belting, Shield
4	11-0061	1	Chain Assembly, Pintle Extension
5	11-0006-1	24	Link, Pintle Chain Extension
6	11-0006-2	2	Chain Slat w/Attachments
7	51-0001	1	Handle
8	45-0002	1	Frame Extension
9	45-0002-7	1	Rod, Tubular Spacer
10	25-0076	1	Bracket, Handle Catch
11	29-0005	1	Spring
12	23-0064	2	Chain Holddown Shaft
13	814-5013-Z	2	Nut ½ Lock
14	851-5013-2.25Z	2	Bolt 1/2x2-1/4
15	44-0051	2	Ext. Holddown Shaft Assy. w/Bolt

#52-0019-PKG HIGHWAY LIGHT PACKAGE KIT



KEY	PART NO.	QTY	DESCRIPTION
1	56-0009	1	7-Way "Stor-A-Way"
2	56-0005	1	Coil Cable Assembly
2a	56-0012	1	7-Contact Plug End
2b	56-0005-1	1	4 Pole Plug
3	56-0004	1	#1232 4-way Socket (4 pin)
4	56-0007	1	1/2" EMT Coupler #260-D
5	56-0006	1	Light Wire Tube Deburred, 1/2" Conduit 22" Long
6	32-0026	8	14" Nylon Tie Strap
7	56-0003	1	Ag Light Harness w/Tri Plugs (Prior to Serial #06T2201)
	56-0032	1	Ag Light Harness w/Module (Serial #06T2201 & Later)
8	56-0002	1	Dual Light RH w/Tri Plug (Prior to Serial #06T2201)
	56-0031	1	Dual Light RH w/4-Plug (Serial #06T2201 & Later)
8a	56-0022	1	Truck Mount Dual Light, RH w/Tri Plug (Prior to Serial #06T2201)
	56-0031-TR	1	Truck Mount Dual Light RH w/4-Prong (Serial #06T2201 & Later)
9	56-0001	1	Dual Light LH w/Tri Plug (Prior to Serial #06T2201)
	56-0030	1	Dual Light LH w/4-Plug (Serial #06T2201 & Later)
9a	56-0021	1	Truck Mount Dual Light, LH w/Tri Plug (Prior to Serial #06T2201)
	56-0030-TR	1	Truck Mount Dual Light LH w/4-Prong (Serial #06T2201 & Later)
10	25-0255	2	Light Mount Bracket (Universal)
11	32-0024	4	3/8" Plated Loom Clamp
12	46-0001-62	1	Caution Tail Light Decal
13	56-0001-3	2	Bezel Blank, Black
14	56-0001-1	4	Amber Lens
15	56-0001-2	2	Red Lens
16	56-0001-4	4	#1157 Bulb
17	56-0028	1	Tail Light Converter (Truck Mount Only)

3200 SERIES BOX PARTS

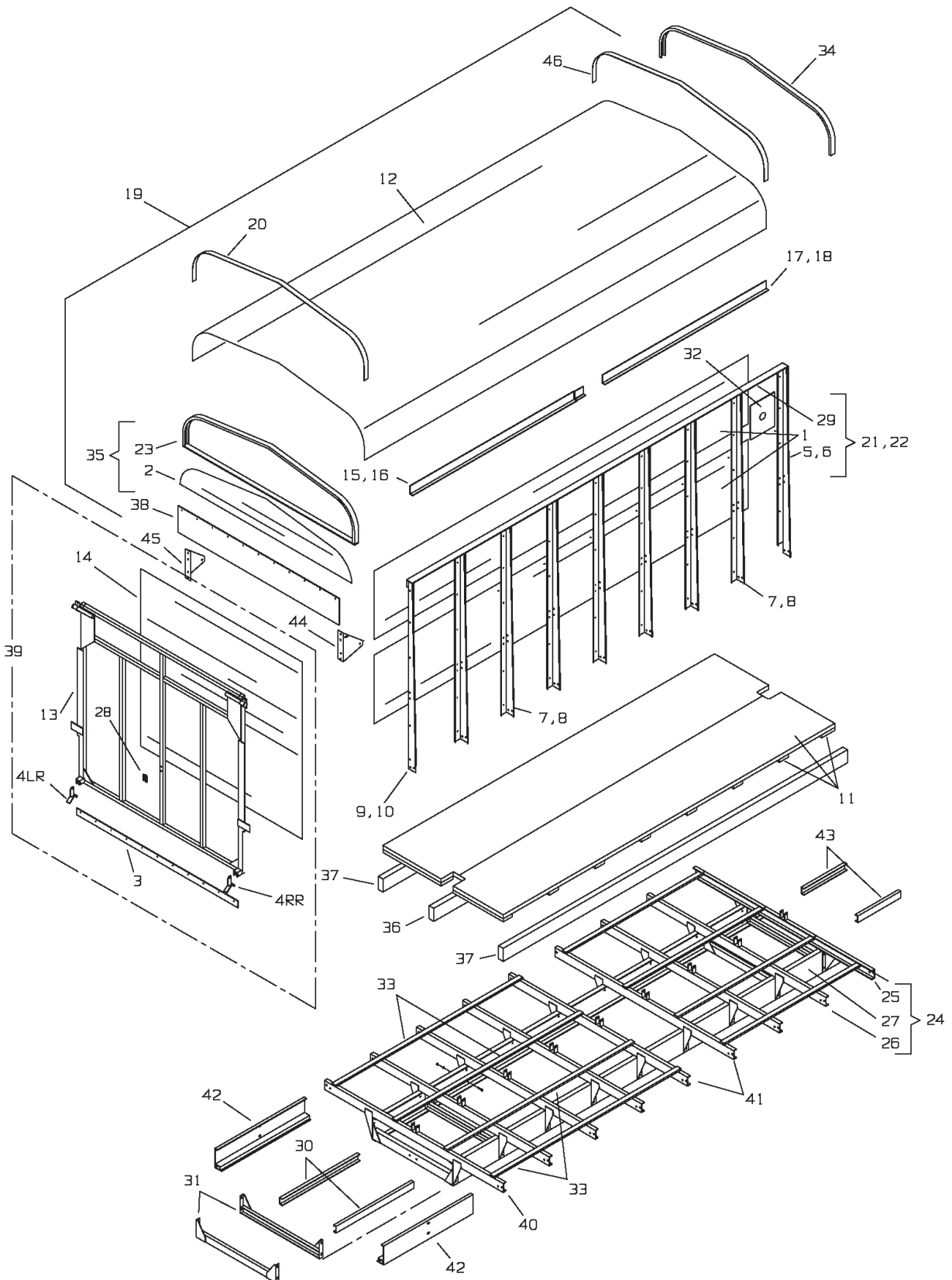


3200 SERIES BOX PARTS

KEY	PART NO.	DESCRIPTION
1	100-9995-18	16' Side Panel, 20GA. X 40-3/4 Alu-minized
	100-9995-17	18' Side Panel, 20GA. X 40-3/4 Alu-minized
	100-9994-10	20' Side Panel, 20GA. X 40-3/4 Alu-minized
2	100-9990-37-3	Rear Roof Panel, 13 X 86" Painted
3	49-0022	Bottom Back Gate Belting
4RR	100-9992-1-7	Right Rear Back Gate Latch Catch
4LR	100-9992-1-8	Left Rear Back Gate Latch Catch
5	100-9990-8-2	Front Right Upright 10GA. X 82-1/2" (Illustrated)
6	100-9990-8-1	Front Left Upright 10GA. X 82-1/2" (Not Illustrated)
7	100-9990-8-6	Center Right Upright 10ga. X 82-1/2" (Illustrated)
8	100-9990-8-5	Center Left Upright 10ga. X 82-1/2" (Not Illustrated)
9	100-9990-8-1	Front Left Upright 10GA. X 82-1/2" (Illustrated)
10	100-9990-8-2	Front Right Upright 10GA. X 82-1/2" (Not Illustrated)
11	100-9992-15	Floor Complete 16' (Poly Bonded)
	100-9992-16	Floor Complete 18' (Poly Bonded)
	100-9992-17	Floor Complete 20' (Poly Bonded)
12	100-9990-14-2	Roof Panel Painted 17'-3"
	100-9990-15-8	Roof Panel Painted 19'-3"
	100-9990-51-1	Roof Panel Painted 21'-3"
13	100-9994-11	Back Gate Panel, 20Ga. X 40-3/4 X 84" Aluminized
14	100-9992-1-6	2-Way Back Gate Frame Only Welded Assy.
15	100-9990-61	Roof Angle Right (Illustrated)
16	100-9990-60	Roof Angle Left (Not Illustrated)
17	100-9990-65-1	Right Roof Angle Ext. 16' (Illustrated)
	100-9990-63-1	Right Roof Angle Ext. 18' (Illustrated)
	100-9990-70	Right Roof Angle Ext. 20' (Illustrated)
	100-9990-49-2	Right Roof Angle Ext. 22' (Illustrated)
18	100-9990-64-1	Left Roof Angle Ext. 16' (Not Illustrated)
	100-9990-62-1	Left Roof Angle Ext. 18' (Not Illustrated)
	100-9990-69	Left Roof Angle Ext. 20' (Not Illustrated)
	100-9990-49-1	Left Roof Angle Ext. 22' (Not Illustrated)
19	100-9992-23	3216, Roof Assy. Complete
	100-9992-24	3218, Roof Assy. Complete
	100-9992-25	3220, Roof Assy. Complete
20	100-9990-14-3	Roof Guard Strap - Rear
21	100-9992-5	Right Side Complete, 16' (Illustrated)
	100-9992-7	Right Side Complete, 18' (Illustrated)
	100-9992-13	Right Side Complete, 20' (Illustrated)

KEY	PART NO.	DESCRIPTION
22	100-9992-6	Left Side Complete, 16' (Not Illustrated)
	100-9992-8	Left Side Complete, 18' (Not Illustrated)
	100-9992-14	Left Side Complete, 20' (Not Illustrated)
23	100-9990-37-1	Rear Roof Bow & Angle Welded Assy.-Red
24	100-9992-10	Bottom Frame Complete 16'
	100-9992-11	Bottom Frame Complete 18'
	100-9992-12	Bottom Frame Complete 20'
25	100-9990-1-3	Front Cross Channel, 94-1/2"
	100-9994-1-3	Front Cross Channel Gusset
26	100-9990-1-2	Center Cross Channel, 94-1/2"
	100-9994-1-1	Cross Channel Gusset
27	100-9992-10-1	10" Channel Bed Piece (16')
	100-9992-11-1	10" Channel Bed Piece (18')
	100-9992-12-1	10" Channel Bed Piece (20')
28	33-1002	SMV Sign Bracket Only
29	100-9990-6-2	Top Rail 16'
	100-9990-8-8	Top Rail 18'
	100-9990-52-1	Top Rail 20'
30	100-9999-39	Stringer Reinforcing Channel
31	100-9994-1-2	Stringer Support Cross Angle
32	100-9999-2-3	Cross Channel Center U Piece
33	100-9998-8	16' Chain Slide
	100-9999-5	18' Chain Slide
	100-9999-74	20' Chain Slide
34	25-0142	3rd Auger Bracket, Less Tightener
35	100-9990-37	Rear Roof Bow Assy. Complete
36	100-9997-2	Center Floor Support, 2x6x16'
	100-9999-6	Center Floor Support, 2x6x18'
	100-9999-75	Center Floor Support, 2x6x20'
37	100-9998-10	Outer Floor Support, 3x6x16'
	100-9999-7	Outer Floor Support, 3x6x18'
	100-9999-76	Outer Floor Support, 3x6x20'
38	100-9994-1-5	Chain Rail Tab
39	49-0019	Top Back Gate Belting
40	100-9992-1	3200 Back Gate Assy. Complete W/Latches
	100-9990-1-11-1	Rear Cross Channel 93-1/4"
42	100-9994-1-3	Rear/Front Cross Channel Gusset
	100-9992-10-2	Cross Channel W/Tightener Mount Holes (Prior To 08 Serial #'s, 2 Per Box)
	100-9992-10-9	Cross Channel w/ Tightener Mount Hole (08 Serial #'s & Later, 1 Per Box)
	100-9994-1-1	Cross Channel Gusset (After 08 Serial #'s, 1 Per Box)
43	100-9990-15-1	TSS Roof Bow
44	100-9990-115	Right Rear Gate Pivot Support Gusset
45	100-9990-116	Left Rear Gate Pivot Support Gusset
46	100-9990-14-4	Front Roof Protector

4200 SERIES BOX PARTS

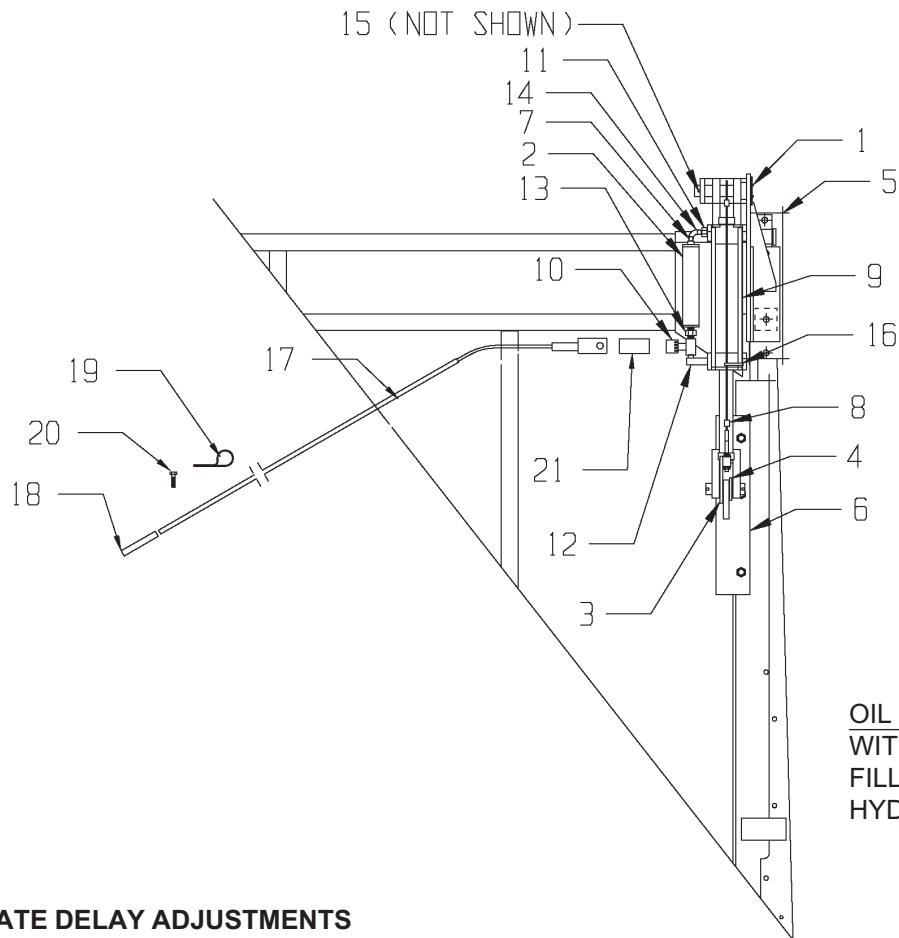


4200 SERIES BOX PARTS

KEY	PART NO.	DESCRIPTION
1	100-9990-6-1	16' Side Panel 20GA. X 40-3/4" Painted
	100-9990-8-7	18' Side Panel 20GA. X 40-3/4" Painted
	100-9990-57	20' Side Panel 20GA. X 40-3/4" Painted
	100-9990-97-2	22' Side Panel 20GA. X 40-3/4" Painted
2	100-9990-37-3	Rear Roof Panel Painted, 13 x 86"
3	49-0022	Bottom Back Gate Belting
4RR	100-9992-1-7	Right Rear Back Gate Latch Catch
4LR	100-9992-1-8	Left Rear Back Gate Latch Catch
5	100-9990-8-2	Front Right Upright 10GA. X 82-1/2" (Illustrated)
6	100-9990-8-1	Front Left Upright 10GA. X 82-1/2" (Not Illustrated)
7	100-9990-8-6	Center Right Upright 10GA. X 82-1/2" (Illustrated)
8	100-9990-8-5	Center Left Upright 10GA. X 82-1/2" (Not Illustrated)
9	100-9990-8-1	Front Left Upright 10GA. X 82-1/2" (Not Illustrated)
10	100-9990-8-2	Front Right Upright 10GA. X 82-1/2" (Not Illustrated)
11	100-9992-15	Floor Complete 16' (Poly Bonded)
	100-9992-16	Floor Complete 18' (Poly Bonded)
	100-9992-17	Floor Complete 20' (Poly Bonded)
	100-9992-18	Floor Complete 22' (Poly Bonded)
12	100-9990-14-2	Roof Panel Painted 17'-3"
	100-9990-15-8	Roof Panel Painted 19'-3"
	100-9990-51-1	Roof Panel Painted 21'-3"
	100-9990-54-1	Roof Panel Painted 23'-3"
13	100-9992-1-6	2-Way Back Gate Frame Only Welded Assy.
14	100-9990-25-14	Back Gate Panel, 20GA X 40-3/4 X 84 Painted
15	100-9990-61	Roof Angle Right (Illustrated)
16	100-9990-60	Roof Angle Left (Not Illustrated)
17	100-9990-65-1	Right Roof Angle Ext. 16' (Illustrated)
	100-9990-63-1	Right Roof Angle Ext. 18' (Illustrated)
	100-9990-70	Right Roof Angle Ext. 20' (Illustrated)
	100-9990-97-4	Right Roof Angle Ext. 22' (Illustrated)
	100-9990-49-2	Right Roof Angle Ext. 22' (illustrated)
18	100-9990-64-1	Left Roof Angle Ext. 16' (Not Illustrated)
	100-9990-62-1	Left Roof Angle Ext. 18' (Not Illustrated)
	100-9990-69	Left Roof Angle Ext. 20' (Not Illustrated)
	100-9990-97-3	Left Roof Angle Ext. 22' (Not Illustrated)
	100-9990-49-1	Left Roof Angle Ext. 22' (Not Illustrated)
19	100-9990-47	4216, Roof Assy. Complete
	100-9990-48	4218, Roof Assy. Complete
	100-9990-51	4220, Roof Assy. Complete
	100-9990-49	4222, Roof Assy. Complete
20	100-9990-14-3	Roof Guard Strap - Rear

KEY	PART NO.	DESCRIPTION
21	100-9993-5	Right Side Complete 16' (Illustrated)
	100-9993-7	Right Side Complete 18' (Illustrated)
	100-9993-11	Right Side Complete 20' (Illustrated)
	100-9990-97-6	Right Side Complete 22' (Illustrated)
22	100-9993-6	Left Side Complete 16' (Not Illustrated)
	100-9993-8	Left Side Complete 18' (Not Illustrated)
	100-9993-12	Left Side Complete 20' (Not Illustrated)
	100-9990-97-5	Left Side Complete 22' (Not Illustrated)
23	100-9990-37-1	Rear Roof Bow & Angle Welded Assy.-Black
24	100-9993-3	Bottom Frame Complete 16'
	100-9993-2	Bottom Frame Complete 18'
	100-9993-1	Bottom Frame Complete 20'
	100-9993-13	Bottom Frame Complete 22'
25	100-9990-1-4	Front Cross Channel 94-1/2" W/Gussets
26	100-9990-1-5	Center Cross Channel 94-1/2" W/Gussets
27	100-9999-41	10" Channel Bed Piece (16')
	100-9999-1	10" Channel Bed Piece (18')
	100-9993-1-1	10" Channel Bed Piece (20')
	100-9993-13-1	10" Channel Bed Piece (22')
28	33-1002	SMV Sign Bracket Only
29	100-9990-6-2	Top Rail 16'
	100-9990-8-8	Top Rail 18'
	100-9990-52-1	Top Rail 20'
	100-9990-97-7	Top Rail 22'
30	100-9999-39	Stringer Reinforcing Channel,(16' & Shorter)
31	100-9999-38	Stringer Support Cross Channel Assy.
32	25-0142	3rd Auger Bracket Less Tightener
33	100-9998-8	16' Chain Slide
	100-9999-5	18' Chain Slide
	100-9999-74	20/22' Chain Slide
34	100-9990-15-1	TSS Roof Bow
35	100-9990-37	Rear Roof Bow Assy. Complete
36	100-9997-2	Center Floor Support, 2x6x16'
	100-9999-6	Center Floor Support, 2x6x18'
	100-9999-75	Center Floor Support, 2x6x20'
	100-9999-77	Center Floor Support, 2x6x22'
37	100-9998-10	Outer Floor Support, 3x6x16'
	100-9999-7	Outer Floor Support, 3x6x18'
	100-9999-76	Outer Floor Support, 3x6x20'
	100-9999-78	Outer Floor Support, 3x6x22'
38	49-0019	Top Back Gate Belting
39	100-9993-10	4200 Back Gate Assy. Complete W/Latches
40	100-9990-1-11	Rear Cross Channel W/Gussets 93-1/4"
41	100-9992-10-5	Cross Channel W/Tightener Holes & Gussets
42	100-9990-1-10	Stringer Reinforcing Plate (18' & Longer)
43	100-9990-53-2	Front Stringer Support Channel
44	100-9990-115	Right Rear Gate Pivot Support Gusset
45	100-9990-116	Left Rear Gate Pivot Support Gusset
46	100-9990-14-4	Front Roof Protector

GATE 3100/3200/4100/4200 BOX



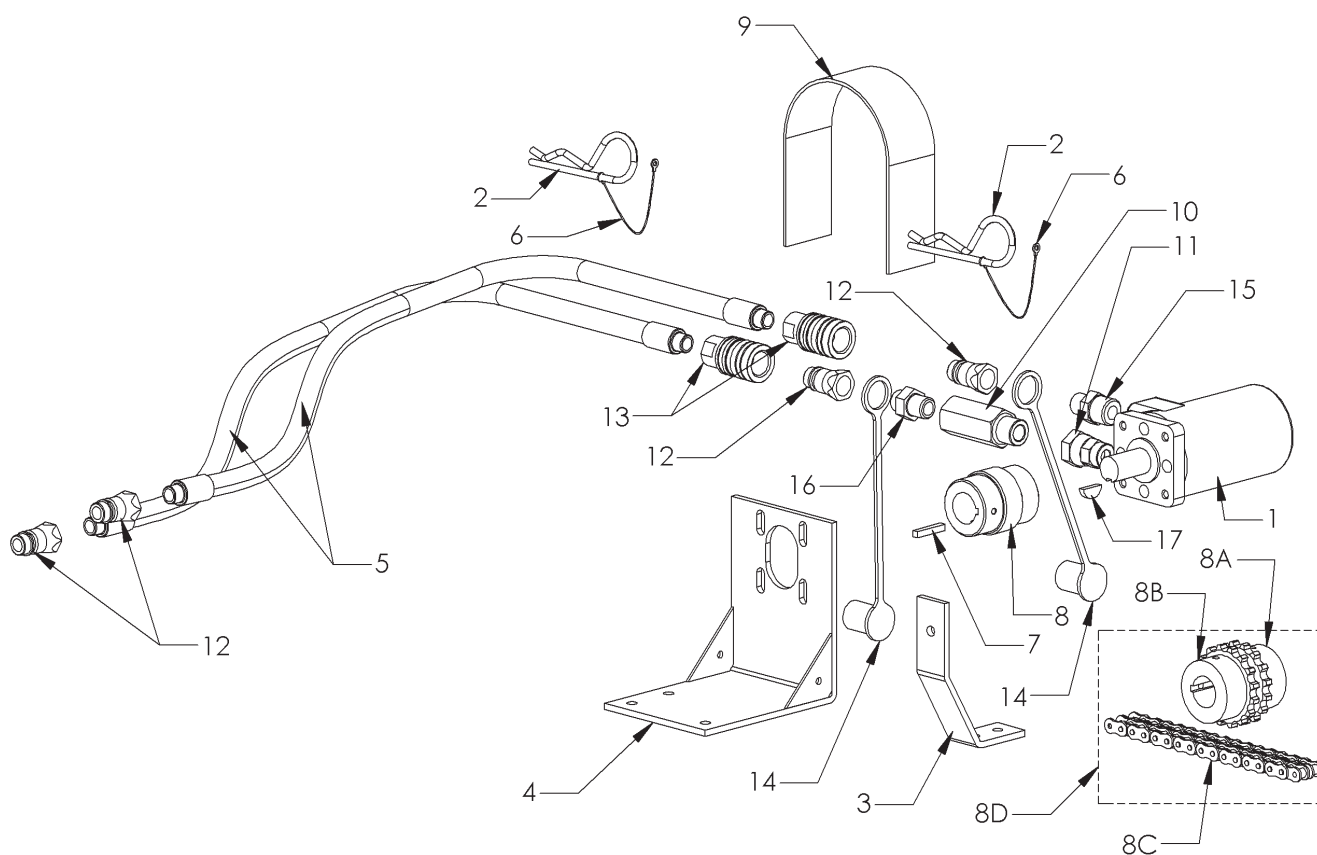
GATE DELAY ADJUSTMENTS

When the gate is completely closed (Tight to rear upright) cable and eyebolt assembly should be adjusted so cable has no slack. Cable should be tight but not overtightened. If cable and eyebolt is overtightened lower cylinder will trip out of the L-shaped slot on the lower bracket too soon and the gate will try to close before the cylinder is stroked out. If the cable and eyebolt is too loose the lower cylinder will not trip out of the L-shaped slot and the cylinder will reach its maximum stroke and the gate will still not be in the closed position. The gate will be held open by the top cylinder bracket and the bracket may become damaged over time. Eyebolt and cable will need to be adjusted periodically to maintain proper operation.

KEY	PART NO.	DESCRIPTION
	4200-GATE	Gate Delay Closing Option
1	25-8092-1	Gate Regulator Top Shaft
2	25-8095	Oil Reservoir Assembly
3	25-8096	Gate Release Trip Arm Assembly
4	25-8097-1	Lower Sleeve Spacer
5	25-8099	Top Cylinder Bracket
6	25-8100	Lower Mount Plate Welded Assembly
7	30-0015	1/4" Fitting x 90 Degree Elbow
8	25-8098	Cable Eyebolt Assembly
9	55-0093	Hydraulic Cylinder
10	55-0094	Flow Control
11	55-0095	1/8" to 3/8" NPT Reducer
12	55-0096	3/8" NPTF x 90 Degree Male Pipe Elbow
13	55-0097	3/8" to 3/8" Nipple

KEY	PART NO.	DESCRIPTION
14	735-.25CT	1/4" Copper Tubing (.25 Ft. Req)
15	823-19-2	3/16 x 2" Cotter Pin
16	952-0001-7	Nylon Tie Strap
17	25-8101	Ground Control Rod Assy. W/Grip
18	51-0007	Handle Grip
19	933-3804	5/16 x 4" Eyebolt
20	825-25-1Z	1/4x1" Self Tapping Screw
21	25-8102-2	Drag Sleeve (Hose)

OPTIONAL HYDRAULIC DRIVE



KEY	PART NO.	QTY	DESCRIPTION
1	55-0099	1	Hydraulic Motor T-Series
2	823-.25-5Z	2	Hitch Pin Clip, 1/4 x 5"
3	25-0280-1	1	Hydraulic Clutch Bottom Bracket Brace
4	25-0283	1	Stationary Hydraulic Motor Bracket Assy.
5	55-0034	2	1/2 x 120" Long Hydraulic Hose (Trailer Type Only)
6	32-0022	2	Lanyard
7	35-0012	1	1/4 x 1-1/2" Square Key
8	37-0012	1	Stationary Hydraulic Motor Coupler-Welded (Prior to 07 Serial #)
8A	37-0013-1	1	Shaft Coupler Sprocket-1" Bore (Serial # 07 & Later)
8B	37-0017-1	1	Shaft Coupler Sprocket 1-1/4" Bore (Serial # 07 & Later)
8C	37-0013-2	1	#50 Double Coupler Chain
8D	37-0019	AR	Chain Coupler Assembly Complete (Serial # 07 & Later)
9	49-0027-1	1	Stationary Hydraulic Motor Belting
10	55-0007-B	1	3/4" Check Valve
11	55-0048	1	7/8" Straight to 3/4" NPSM Swivel Coupler
12	55-0013	4	Male Hydraulic Coupler (Trailer Type Only)
13	55-0035	2	Female Hydraulic Coupler (Trailer Type Only)
14	55-0036	2	Hydraulic Coupler Dust Cap (Trailer Type Only)
15	55-0156	1	3/4" to 1/2" Chamfered Hydraulic Adapter
16	55-0159	1	5/8" to 1/2" Straight to Pipe Male Adapter
17	801	1	1/4" Woodruff Key

MEYER FRONT & REAR FORAGE BOXES

“TROUBLE SHOOTING”

	SYMPTOM	PROBLEM	SOLUTION
AUGERS	Augers shake or chatter.	Stiff roller chains - dry. Loose roller chains. Worn sprockets/chains. Bad roller bearings.	Lubricate roller chains. Tighten roller chains. Replace sprockets/chains. Replace roller bearings.
	Under load, augers do not start in 1st or 2nd notch	Variable speed not adjusted.	Adjust variable speed.
BELT DRIVE “VARIABLE SPEED”	Belt slippage.	Sheaves greasy or wet. Use of “HI” Range w/full load.	Clean sheaves. Use “LO” Range w/full loads.
	Belt wear/breakage.	Variable speed not adjusted. PTO starting w/belt engaged.	Adjust variable speed. Start PTO w/belt in “Neutral.”
	Sheave pin breakage.	Incorrect operating procedures. PTO starting w/belt engaged.	Follow correct operating procedures. Start PTO w/belt in “Neutral.”
CROSS APRON	Material build-up under chain.	Loose cross apron.	Tighten cross apron.
	Bent apron slats.	Dirty cross apron, too much carry back.	Clean apron and return area.
	Broken pintle chain.	Build-up in clean-out panel.	Clean out “Clean-Out” panel.
GEAR BOXES	Clunking sounds.	Gears/bearings wearing — low oil	Replace gears/bearings — fill with oil
	Excessive gear wear.	Full load “HI” Range unloading. Wrong gear lube oil.	Start full loads in “LO” Range. Use #80-90 wt. gear lube oil.
	Broken gears.	High speed start-up/no oil. Worn out gears.	Slow start-up/fill with oil. Replace gears.
“HI-LO” RANGE	Hard to shift lever.	Unit not running.	Run unit with variable speed lever engaged.
	“HI-LO” is not engaging.	Worn brass shifting collar.	Replace brass shifting collar.
	Slipping out of range.	Excessive clutch wear.	Adjust range control linkage. Flip over or replace clutches.
MAIN APRON	Jumping links.	Loose main apron.	Tighten main apron.
	Bent apron slats.	Worn/broken chain.	Clean/tighten/replace apron.
	Broken pintle chain.	Front unit sagging.	Lift unit and replace front cross channel.
PTO SHAFT	Whips/shakes.	Over extended or bent PTO.	Shorten wagon gear hitch length. Straighten/replace PTO.
	Vibrates up and down.	Forage box center shaft bent.	Replace center shaft.
	Worn universal joints.	Lack of lubrication/used	Lubricate joints daily/replace
ROLLER CHAINS AND SPROCKETS	Excessive chain wear.	Lack of lubrication. Out of alignment/loose.	Lubricate/align/tighten.
	Roller chain breakage.	Loose roller chain. Worn sprockets.	Tighten roller chains. Replace sprockets.
	Sprocket teeth tipped over.	Worn roller chain. Bad roller bearings.	Replace roller chain. Replace bearings.
SAFETY CLUTCH	Does not trip.	Bad or damaged clutch. Safety cable disconnected. Safety cable broken.	Replace safety clutch. Re-fasten safety cable. Replace safety cable.

MEYER FRONT & REAR UNLOAD FORAGE BOXES

"SPECIFICATIONS"

MODEL	3216	3218	3220	4216	4218	4220	4222
Floor Length	16' 6"	18' 6"	20'6"	16' 6"	18' 6"	20'6"	22'6"
Overall Length	20' 2"	22' 2"	24'2"	20' 2"	22' 2"	24'2"	26'2"
Weight	5000#	5280#	5560#	5340#	5620#	5900#	6180#
Main Apron	667H Standard (667X Optional)			667X Standard			
Overall Width	All Models 107"						
Inside Width	All Models 87"						
Overall Height	All Models 113-1/2" w/Roof						
Inside Height	All Models 94" w/Roof						
Speed Selection Front Unload	All Models- Low Range: 0 - 7.5'/minute - High Range 0 - 17'/minute						
Speed Selection Rear Unload	(PTO Drive) All Models-Approximately 30 Second Unloading Time (Hyd. Drive) All Models-Approximately 2-Minute Unloading Time						
Auger Feathering System	All Models-Standard Equipment						
Power Source	540 PTO and Hydraulic						
Cross Feed Delivery	Either Left or Right Hand Discharge						
Unloading Auger	3 Large 18" Diameter Augers						
Cross Conveyor Chain	D662 Pintle Chain						
Cross Conveyor Width	All Models-21"						
Box Tie Down Kit	All Models-Standard Equipment						
Cross Conveyor Outfeed	12" Extension Standard (24" Fold-up Optional)						
Safety Clutch	All Models Standard Equipment						

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

MEMBER



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